

## CATALOGUE OF THE NAMES PUBLISHED BY HECTOR LÉVEILLÉ: XIII

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**ABSTRACT.** The species described by Léveillé belonging to the families Loganiaceae, Scrophulariaceae, Orobanchaceae, Lentibulariaceae, Gesneriaceae, Bignoniaceae, Pedaliaceae, Acanthaceae, Myoporaceae, Verbenaceae, and Phrymaceae are evaluated. Other species described in, but not belonging to, these families are also included. There are six new combinations: *Mimulus nepalensis* Benth. ssp. *bodinieri* (Van.) McKean, *Verbascum coromandelianum* (Vahl) O. Kuntze ssp. *sinense* (Lévl. & Giraud) McKean, *Paraboea martinii* (Lévl.) B. L. Burtt, *Paraboea rufescens* (Franch.) B. L. Burtt, *Paraboea sinensis* (Oliv.) B. L. Burtt, and *Paraboea thirionii* (Lévl.) B. L. Burtt..

### INTRODUCTION

This paper follows the same format as those previously published and listed below.\*

The family Scrophulariaceae was prepared and written by my colleague Mr D. McKean. Gesneriaceae was written in collaboration with Mr B. L. Burtt and I am grateful to him for his help in this family. Some years ago, Dr A. B. M. Enayet Hossain of Sylhet, Bangladesh, worked at Edinburgh on the Acanthaceae and kindly prepared a manuscript on this family for the Léveillé Catalogue. Although it has been edited slightly for the Catalogue, the work is solely his.

In accordance with the usual practice in this Catalogue, details of type specimens cited by Rehder (*Journ. Arn. Arb.* 15, 1934; 16, 1935; 18, 1937) are not repeated here.

### LOGANIACEAE

This family should have appeared in Part XII of the Catalogue after no. 1448 but was held over until the completion of the revision of *Buddleja* by Leeuwenberg (1979). The entries are lettered under no. 1448.

**1448a. *Buddleja asiatica*** Lour., Fl. Coch. 72 (1790); Rehder in *Journ. Arn. Arb.* 15:309 (1934); Leeuwenberg in *Meded. Landbouwhogeschool Wageningen* 79-6:92 (1979).

*Vitex esquirolii* Lévl., Fl. Kouy-Tchéou 443 (1915).

**1448b. *Buddleja crispa*** Benth., Scroph. Ind. 43 (1835); Hand.-Mazz., *Symb. Sin.* 7:947 (1936); Leeuwenberg in *Meded. Landbouwhogeschool Wageningen* 79-6:105 (1979).

*B. truncatifolia* Lévl. in Fedde, Rep. Sp. Nov. 13:342 (1914) & Cat. Pl. Yunnan 171 (1916).

\* Part I, *Notes R.B.G. Edinb.* 23:573-596 (1961); II, 24:73-78 (1962); III, 26: 333-346 (1966); IV, 27:1-10 (1966); V, 27:265-292 (1967); VI, 30:239-294 (1970); VII, 31:397-435 (1972); VIII, 32:93-116 (1972); IX, 34:327-402 (1976); X, 35:247-264 (1977); XI, 35:265-279 (1977); XII, 37:125-151 (1978).

*B. tibetica* W. W. Sm. var. *truncatifolia* (Lévl.) Marquand in Kew Bull. 1930:205 (1930); Rehder in Journ. Arn. Arb. 15:310 (1934) & 18:234 (1937).

**1448c. *Buddleja paniculata*** Wall. in Roxb., Fl. Ind. 1:412 (1820); Leeuwenberg in Meded. Landbouwhogeschool Wageningen 79-6:142 (1979).

*B. acutifolia* C. H. Wright in Kew Bull. 1896:24 (1896); Rehder in Journ. Arn. Arb. 15:310 (1934).

*B. mairei* Lévl. in Fedde, Rep. Sp. Nov. 13:258 (1914) & Cat. Pl. Yunnan 171 (1916); Hand.-Mazz., Symb. Sin. 7:948 (1936) pro syn. sub *B. officinalis* Maxim.

*B. mairei* Lévl. f. *albiflora* Lévl., Cat. Pl. Yunnan 171 (1916).

*B. acutifolia* C. H. Wright f. *albiflora* (Lévl.) Rehder in Journ. Arn. Arb. 15:310 (1934).

*B. officinalis* Maxim. f. *albiflora* (Lévl.) Rehder in Journ. Arn. Arb. 18:276 (1937).

CHINA. Yunnan, Mo-tsou, 700 m, vallée, arbuste haut de 2 à 3 m, feuilles velues et blanches endessous, fl. blanches, *E. E. Maire* s.n. (holo. f. *albiflora*, E).

Léveillé did not cite a specimen under f. *albiflora*, but it is almost certain that the specimen above, labelled as the holotype by Leeuwenberg, is the one on which Léveillé based his form.

*Buddleja plectranthoidea* Lévl. = *Elsholtzia fruticosa* (Rehder) Marquand (Labiatae). Det. by J. R. Press (BM).

**1448d. *Gardneria multiflora*** Makino; Rehder in Journ. Arn. Arb. 15:309 (1934); Leenhouts in Bull. Jard. Bot. Brux. 32:433 (1962); Lauener in Notes R.B.G. Edinb. 27:280, 291 (1967) & 32:97, 112 (1972).

*Sabia esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 9:457 (1911) & Fl. Kouy-Tchéou 379 (1915).

*Paederia bodinieri* Lévl. in Fedde, Rep. Sp. Nov. 13:179 (1914); Hand.-Mazz. in Sinensia 5:21 (1934).

*Marlea cavaleriei* Lévl., Fl. Kouy-Tchéou 116 (1914).

*Rhamnus pasteurii* Lévl. in Le Monde des Pl. sér. 2, 18:31 (1916) & China Rev. Ann. 27 (1916).

*Labordea fauriei* Lévl. = *Pisonia umbellifera* (Forst.) Seem. (Nyctaginaceae).

*Mitrasacme mairei* Lévl. = *Androsace erecta* Maxim. (Primulaceae).

**1448e. *Mitrasacme pygmaea*** R. Br. var. *malaccensis* (Wight) Hara in Journ. Jap. Bot. 30:24 (1955).

*M. malaccensis* Wight, Icon. Pl. Ind. Or. 4(4):15, t. 1601 (2) (1850).

*M. lutea* Lévl. in Fedde, Rep. Sp. Nov. 4:331 (1907).

HONG KONG. Dans les herbages courts, remarquable par ses fleurs jaune-orange et des tiges et feuilles à poils scabres, 13 iii 1895, *Bodinier* 1060 (holo. *M. lutea*, E).

**1448f. *Mitreola pedicellata*** Benth. in Journ. Linn. Soc. (Bot.) 1:91 (1856); Leeuwenberg in Meded. Landbouwhogeschool Wageningen 74-23:5 (1974).

*Cynoctonum pedicellatum* (Benth.) B. L. Rob. in Proc. Am. Acad. Arts Sci. 45:396 (1910); Leenhouts in Bull. Jard. Bot. Brux. 32:417 (1962); Lauener in Notes R.B.G. Edinb. 32:111 (1972).

*Omphalodes bodinieri* Lévl. in Fedde, Rep. Sp. Nov. 12:188 (1913).

*Ophiorrhiza darrisii* Lévl. in Fedde, Rep. Sp. Nov. 13:176 (1914).

*Ophiorrhiza marchandii* Lévl. in Fedde, Rep. Sp. Nov. 13:176 (1914).

*Trigonotis bodinieri* (Lévl.) Lévl., Fl. Kouy-Tchéou 55 (1914).

*Mitreola bodinieri* (Lévl.) Lévl., Fl. Kouy-Tchéou 262 (1914).

*Mitreola darrisii* (Lévl.) Lévl., Fl. Kouy-Tchéou 262 (1914).

CHINA. Kweichow, Pin-fa, bord de l'eau, lieux ombrages, 15 iv 1902, *Cavalerie* 16 bis (holo. *Omphalodes bodinieri*, *Trigonotis bodinieri*, *Mitreola bodinieri*, E); Tong-tchéou (moulins) sous roche, endroit très humide, 1400 m, 22 vi 1912, *Esquirol* 3263 (holo. *Ophiorrhiza darrisii*, *Mitreola darrisii*, E); Hoang-tsao-pa, chutes d'eau, fleur blanche, vi 1909, *Esquirol* 1547 (holo. *Ophiorrhiza marchandii*, E).

*Strychnos esquirolii* Lévl. = *Zizyphus pubinervis* Rehder (Rhamnaceae).

#### REFERENCE FOR LOGANIACEAE

LEEUEWENBERG, A. J. M. (1979). The Loganiaceae of Africa XVIII. *Buddleja* L. II. Revision of the African and Asiatic species. *Meded. Landbouwhogeschool Wageningen* 79-6:1-163.

#### SCROPHULARIACEAE

(D. MCKEAN)

Many of the Scrophulariaceae in the Léveillé herbarium were described as new species by Bonati, but only those species associated in one way or another with Léveillé or Vaniot, are dealt with below.

1512. *Alectra avensis* (Benth.) Merrill in Philipp. Journ. Sci. (Bot.) 12:109 (1917) "arvensis"; Melchior in Notizbl. Bot. Gart. Berlin 15:440 (1941).

*Glossostylis avensis* Benth., Scroph. Ind. 49 (1835).

*Alectra indica* Benth. in DC., Prodr. 10:339 (1846); Lévl., Fl. Kouy-Tchéou 393 (1915); Lauener in Notes R.B.G. Edinb. 27:8 (1966).

*Sida cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 12:185 (1913).

*Melasma arvense* (Benth.) Hand.-Mazz., Symb. Sin. 7:843 (1936).

CHINA. Kweichow, environs de Tou-Chan, ix 1899, *Cavalerie in herb. Bodinier* 2715 (holo. *S. cavaleriei*, E).

The specific epithet is derived from the village of Ava in Upper Burma and both Merrill and Handel-Mazzetti misspelled it.

1513. *Bacopa monnieri* (L.) Pennell in Proc. Acad. Nat. Sci. Philad. 98:94 (1946); Degener, Ill. Fl. Haw. 5:319 (1962).

*Lysimachia monnieri* L., Cent. Pl. 2:9 (1756).

*Herpestis monniera* (L.) H.B.K., Nov. Gen. 2:294 (1817); Rock in Fedde, Rep. Sp. Nov. 13:358 (1914).

*H. fauriei* Lévl. in Fedde, Rep. Sp. Nov. 10:155 (1911).

HAWAIIAN (SANDWICH) ISLANDS. Holo, v 1909, *Faurie* 1126 (typus *Herpestis fauriei*—n.v.).

**1514. *Brandisia racemosa*** Hemsl. in Hook., Icon. Pl. 24: t. 2383 (1895) & in Kew Bull. 1895:114 (1895); Rehder in Journ. Arn. Arb. 16: 315 (1935) & 18:245 (1937); Lauener in Notes R.B.G. Edinb. 30:284 (1970).

*Deutzia funebris* Lévl., Sert. Yunnanense 1 (1916) & Cat. Pl. Yunnan 296 (1917).

CHINA. Yunnan, rives du fleuve Bleu à Kiang-Pien, 350 m, viii 1912, *E. E. Maire* s.n. (holo. *D. funebris*, E).

**1515. *Limnophila connata*** (Buch.-Ham. ex D. Don) Hand.-Mazz., Symb. Sin. 7:837 (1936); Li in Bot. Bull. Acad. Sin. 5:115 (1964); Philcox in Kew Bull. 12:133 (1970).

*Cybbanthera connata* [Buch.-Ham. ex] D. Don, Prodr. Fl. Nep. 87 (1825).

*Limnophila hypericifolia* (Benth.) Benth. in DC., Prodr. 10:386 (1846); Bonati in Lévl., Fl. Kouy-Tchéou 394 (1915).

*L. cavaleriei* Van. in Bull. Acad. Géog. Bot. 15:85 (1905).

CHINA. Kweichow, environs de Tou-chan, endroits marécageux, fleurs violettes, 20 ix 1899, *Cavalerie in herb. Bodinier* 1897 bis (syntype *L. cavaleriei*, E); route de Tsin-tchen à Gan-pin, marécages, fleurs bleu-violet, 15 ix 1897, *Martin in herb. Bodinier* 1897 (syntype *L. cavaleriei*, E).

**1516. *Lindenbergia muraria*** (Roxb.) Brühl in Journ. Dept. Sci. Univ. Calcutta 2:27 (1920); Prijanto in Reinwardtia 7:548 (1969).

*Stemodia muraria* [Roxb. ex] D. Don, Prodr. Fl. Nep. 89 (1825).

*Lindenbergia urticifolia* Lehm. var. *cavaleriei* [Lévl. ex] Bonati in Lévl., Fl. Kouy-Tchéou 395 (1915).

CHINA. Kweichow, Gan-chouen et Tchen lin, grottes et rochers, xii 1909-10, *Cavalerie* 3811 (wrongly cited as 3311) (holo. var. *cavaleriei*, E).

**1517. *Lindenbergia philippensis*** (Cham.) Benth. in DC., Prodr. 10:377 (1846); Bonati in Lévl., Fl. Kouy-Tchéou 394 (1915); Prijanto in Reinwardtia 7:552 (1969).

*Stemodia philippensis* Cham. in Linnaea 3:5 (1828).

*S. bodinieri* Van. in Bull. Acad. Géog. Bot. 15:87 (1905).

CHINA. Kweichow, sur la frontière du Kouy-Tchéou à Kiang ty, tige sous ligneuse, branchue, fleurs jaune-citron, item. bord de la petite rivière, après Hin-y-hien, 9 iv 1897, *Bodinier* 1500 (holo. *S. bodinieri*, E).

**1518. *Lindernia anagallis*** (Burm. f.) Pennell in Journ. Arn. Arb. 24:252 (1943); Philcox in Kew Bull. 22:45 (1968).

*Ruellia anagallis* Burm. f., Fl. Ind. 135 (1768).

*Vandellia callitrichifolia* Lévl. in Bull. Soc. Agric. Sci. Arts Sarthe 39: 325 (1904) & in Fedde, Rep. Sp. Nov. 6:377 (1908).

HONG KONG. Petit Hong Kong, dans les champs de riz, demi-inondés après la moisson, fleurs bleu foncé, deux pinceaux de poils bleus à la gorge, 24 xi 1895, *Bodinier* s.n. (holo. *V. callitrichifolia*, E).

**1519. *Lindernia crustacea*** (L.) F. Muell., Syst. Cens. Austral. Pl. 1:97 (1882); Philcox in Kew Bull. 22:17 (1968).

*Capraria crustacea* L., Mant. 1:87 (1767).



*Vandellia bodinieri* Lévl. in Bull. Soc. Agric. Sci. Arts Sarthe 39:324 (1904) & in Fedde, Rep. Sp. Nov. 6:377 (1908).

HONG KONG. Dans les gazons incultes à Kennedy Town, 20 ix 1893, *Bodinier* 481 (holo. *V. bodinieri*, E).

**1520. *Lindernia setulosa*** (Maxim.) Tuyama ex Hara in Journ. Jap. Bot. 19:207 (1943); Philcox in Kew Bull. 22:31 (1968).

*Torenia setulosa* Maxim. in Bull. Acad. Sci. St. Pétersb. 31:72 (1886).

*Vandellia cavaleriei* Lévl. in Bull. Soc. Agric. Sci. Arts Sarthe 39:324 (1904) & in Fedde, Rep. Sp. Nov. 6:377 (1908); Bonati in Lévl., Fl.

Kouy-Tchéou 400 (1915), pro syn. sub *Vandellia crustacea* (L.) Benth. CHINA. Kweichow, environs de Tou-chan, fleurs blanches, 7 vi 1898, *Cavalerie* s.n. (holo. *V. cavaleriei*, E).

**1521. *Mazus longipes*** Bonati in Bull. Herb. Boiss. sér. 2, 8:532 (1908) & in Lévl., Fl. Kouy-Tchéou 395 (1915); Li in Brittonia 8:36 (1954).

*Didissandra stolonifera* Lévl. & Van. in Bull. Soc. Bot. Fr. 53:550 (1906);

Lévl. in Fedde, Rep. Sp. Nov. 9:323 (1911), pro syn. sub *Mazus rugosus* Lour. var. *rotundifolia* Franch. & Sav.

CHINA. Kweichow, Pin-fa, fl. violette, 10 iv 1902, *Cavalerie* 810 (holo. *D. stolonifera*, E).

**1522. *Mazus pumilus*** (Burm. f.) Steen. in Nova Guinea, n.s. 9(1):31 (1958).

*Lobelia pumila* Burm. f., Fl. Ind. 186, t. 60, f. 3 (1768).

*Mazus bodinieri* Bonati in Bull. Herb. Boiss. sér. 2, 8:530 (1908) p.p.

*Lobelia esquirolii* Lévl., Fl. Kouy-Tchéou 58 (1914).

CHINA. Hupeh, sine loc., *Wilson* 931 (syntype *M. bodinieri*, E). Kweichow, mont du Collège, 1400 m, violette, iv 1910, *Esquirol* 2062 (holo. *Lobelia esquirolii*, E).

**1523. *Mazus spicatus*** Van. in Bull. Acad. Géog. Bot. 15:85 (1905); Bonati in Lévl., Fl. Kouy-Tchéou 395 (1915); Icon. Cormophyt. Sin. 4:15 (1975).

*Mazus bodinieri* Bonati in Bull. Herb. Boiss. sér. 2, 8:530 (1908), p.p.; Li in Brittonia 8:36 (1954).

CHINA. Kweichow, environs de Kouy-yang, dans la mont. à Hong-gay, bords des ruisselets, haies, fleurs blanc-bleuâtre, 16 v 1897, *Bodinier* 1593 (holo. *M. spicatus*, E); Pin-fa, fl. blanches, 12 v 1902, *Cavalerie* 809 (syntype *M. bodinieri*, E).

One of the syntypes of *M. bodinieri*, *Wilson* 931, has been determined by Li as *Mazus japonicus*, a synonym of *M. pumilus*.

*M. spicatus* may be only a more western form of *M. stachydifolius* (Turcz.) Maxim.

**1524. *Melampyrum esquirolii*** (Lévl. & Van.) Hand.-Mazz., Symb. Sin. 7:846 (1936); Li in Taiwania 1:146 (1950).

*M. roseum* auct. non Maxim.; Bonati in Lévl., Fl. Kouy-Tchéou 395 (1915).

*Scutellaria esquirolii* Lévl. & Van. in Fedde, Rep. Sp. Nov. 8:402 (1910).

CHINA. Kweichow, depuis le col de Pay-so jusqu'à Pai-yang par Kay-lang, 22 vi 1905, *Esquirol* 484 (holo. *S. esquirolii*, E).

**1525. *Mimulus nepalensis* Benth. subsp. *bodinieri* (Van.) McKean, comb. nov.**

*M. bodinieri* Van. in Bull. Acad. Géog. Bot. 15:86 (1905); Grant in Ann. Miss. Bot. Gard. 11:208 (1924); Pai in Contr. Inst. Bot. Nat. Acad. Peiping 2:124 (1934), 2:187 (1934); Hand.-Mazz., Symb. Sin. 7:833 (1936).

*M. tenellus* Bge. f. *bodinieri* [Van. ex] Bonati in Lévl., Fl. Kouy-Tchéou 396 (1915).

CHINA. Kweichow, dans les fossés du bord de la route entre Hin-y-fou et Hin-y-hien, fleurs jaune-citron, 10 iv 1897, *Bodinier* 1530 (holo. E).

Handel-Mazzetti placed *M. nepalensis* in synonymy under *M. tenellus* Bge. The former, however, is an eastern Himalayan-SW Chinese species and is quite distinct from *M. tenellus* which has smaller flowers and a more northerly geographical distribution.

**1526. *Pedicularis ganpinensis* [Van. ex] Bonati in Bull. Acad. Géog. Bot. 13:245 (1904) & in Lévl., Fl. Kouy-Tchéou 397 (1915); Lévl., Cat. Pl. Yunnan 262 (1917); Li in Proc. Acad. Nat. Sci. Philad. 100:309, t. 17, f. 37 (1948); Fl. Reipubl. Popul. Sin. 68:175 (1963).**

CHINA. Kweichow, environs de Gan-pin-hsien, commun dans les herbages de la mont., près de la ville, fleurs rose-pourpre, 29 iv 1897, *Bodinier* 1545 (holo. *P. ganpinensis*, E).

**1527. *Pedicularis henryi* Maxim. in Bull. Acad. Sci. St. Pétersb. 32:560, f. 54 (1888); Bonati in Notes R.B.G. Edinb. 15:161 (1926); Li in Proc. Acad. Nat. Sci. Philad. 101:27, t. 2, f. 105 (1949); Fl. Reipubl. Popul. Sin. 68:131 (1963).**

*P. bodinieri* [Van. ex] Bonati in Bull. Acad. Géog. Bot. 13:243 (1904) & in Lévl., Fl. Kouy-Tchéou 396 (1915); Limpr. in Fedde, Rep. Sp. Nov. 20:240 (1924).

CHINA. Kweichow, environs de Kouy Yang, mont. du Collège, pentes herbeuses, belles fleurs rose-pourpre, 26 v 1898, *Bodinier* 2285 (syntype *P. bodinieri*, E); cimetière des Chrétiens, à Ta-yu-po, 31 v 1897, *Bodinier* 1601 (syntype *P. bodinieri*, E); Pin-fa, 12 v 1902, *Cavalerie* 808 (syntype *P. bodinieri*, E).

**1528. *Pedicularis labordei* [Van. ex] Bonati in Bull. Acad. Géog. Bot. 13:242 (1904) and in Lévl., Fl. Kouy-Tchéou 397 (1915); Lévl., Cat. Pl. Yunnan 263 (1917); Limpr. in Fedde, Rep. Sp. Nov. 20:240 (1924); Li in Proc. Acad. Nat. Sci. Philad. 101:28, t. 2, f. 106 (1949); Fl. Reipubl. Popul. Sin. 68:132 (1963); Icon. Cormophyt. Sin. 4:72 (1975).**

CHINA. Kweichow, mont. de Kao-po (Tsin-gay), bords des ruisseaux, endroits marécageux, belles fleurs rose-pourpre, 10 ix 1899, *Laborde* in herb. *Bodinier* 2724 (holo. *P. labordei*, E).

**1529. *Pedicularis lachnoglossa* Hook. f., Fl. Brit. Ind. 4:311 (1884); Li in Proc. Acad. Nat. Sci. Philad. 101:76, t. 7, f. 142 (1949); Fl. Reipubl. Popul. Sin. 68:67 (1963).**

*P. lachnoglossa* Hook. f. var. *macrantha* Bonati in Notes R.B.G. Edinb. 8:41 (1913) & 15:158 (1926); Limpr. in Fedde, Rep. Sp. Nov. 20:231 (1924) & 23:336 (1927).

*P. macrantha* (Bonati) Lévl., Cat. Pl. Yunnan 263 (1917) — non Spreng. (1827) nec Klotzsch (1862).

No Léveillé type is involved, only his combination as above.

**1530. *Pedicularis nigra*** (Van. ex Bonati) Bonati in Lévl., Fl. Kouy-Tchéou 396 in clavi, 397 (1915) & in Notes R.B.G. Edinb. 13:130 (1921) in clavi; Limpr. in Fedde, Rep. Sp. Nov. 20:238 (1924); Hand.-Mazz., Symb. Sin. 7:859 (1936); Li in Proc. Acad. Nat. Sci. Philad. 101:52, t. 4, f. 122 (1949); Fl. Reipubl. Popul. Sin. 68:123 (1963); Icon. Cormophyt. Sin. 4:71 (1975).

*P. colletti* Prain var. *nigra* [Van. ex] Bonati in Bull. Acad. Géog. Bot. 13:240 (1904).

*P. tongchouanensis* Bonati in Notes R.B.G. Edinb. 13:129 (1921).

CHINA. Kweichow, environs de Kouy-yang, mont. du Collège, gorges de Yang-pa, belles fleurs roses, 14 viii 1898; item., route de Kouang-chouen à Tsin-gay, gorges de la mont., 17 viii 1899, *J. Laborde*, *Bodinier* 2509 (syntype *P. nigra*, E); Pin-fa, montagnes, lavée de blanc et de rose, 31 viii 1902, *Cavalerie* 366 (syntype *P. nigra*, E). Yunnan, hautes montagnes (à Tong-tchouan?), *pedicularis* vivace, feuilles de la base en rosette, fl. blanc lavé de rose, ix, *E. E. Maire* s.n. (holo *P. tongchouanensis*, E).

As Li remarked in his discussion (op. cit.) under '*P. nigra* Vaniot' there has been some confusion regarding the correct authority of *P. nigra*. Tsoong referred to it as '*P. nigra* Vaniot ex Bonati' and Handel-Mazzetti and Limpricht as '*P. nigra* (Van.) Bonati'.

Bonati's reference to '*P. nigra* Vaniot' (1904) was contained in his protologue after the formal and valid publication of *P. colletti* var. *nigra*. As a species *P. nigra* was first validly published in a key to *Pedicularis* in the *Flore du Kouy-Tchéou* (1915) and then again in 1921 (loc. cit.), although the basionym was not cited. The 1915 reference listed the type specimens.

**1531. *Pedicularis resupinata*** L. subsp. *crassicaulis* (Van. ex Bonati) Tsoong in Fl. Reipubl. Popul. Sin. 68:121 (1963).

*P. crassicaulis* [Van. ex] Bonati in Bull. Acad. Géog. Bot. 13:241 (1904) & in Lévl., Fl. Kouy-Tchéou 397 (1915); Limpr. in Fedde, Rep. Sp. Nov. 20:239 (1924); Hand.-Mazz., Symb. Sin. 7:859 (1936).

*P. resupinata* L. var. *crassicaulis* (Van. ex Bonati) Limpr. in Fedde, Rep. Sp. Nov. 23:336 (1927); Li in Proc. Acad. Nat. Sci. Philad. 101:52 (1949).

CHINA. Kweichow, environs de Gan-Pin, dans la mont., fleurs rouges, 16 viii 1897, *Martin* in herb. *Bodinier* 1898 (syntype *P. crassicaulis*, E); Pin-fa, montagnes, fleurs roses, 4 ix 1902, *Cavalerie* 395 (syntype *P. crassicaulis*, E).

**1532. *Pedicularis rex*** C.B. Cl. subsp. *pseudocyathus* (Van. ex Bonati) Tsoong in Fl. Reipubl. Popul. Sin. 68:111 (1963).

*P. rex* C.B. Cl. var. *pseudocyathus* [Van. ex] Bonati in Bull. Acad. Géog. Bot. 13:240 (1904) and in Lévl., Fl. Kouy-Tchéou 397 (1915); Lévl., Cat. Pl. Yunnan 264 (1917); Limpr. in Fedde, Rep. Sp. Nov. 20:224 (1924); Li in Proc. Acad. Nat. Sci. Philad. 100:338 (1948).

CHINA. Kweichow, mont. de Lou-tsong-koan, fleurs jaunes, 16 v 1897, *Bodinier* 1594 (holo. *P. rex* var. *pseudocyathus*, E).

**1533. *Pedicularis tsangchanensis*** [Franch. ex] Maxim. in Bull. Acad. Sci. St. Pétersb. 32:571, f. 69 (1888).

*Scrofularia tsangchanensis* (Franch.) Lévl., Cat. Pl. Yunnan 266 (1917), comb. nud.

Léveillé did not cite the basionym of his combination but it is presumed that he was transferring *Pedicularis tsangchanensis*, although it is not known why.

**1534. *Rehmannia glutinosa*** (Gaertn.) Libosch. ex Fisch. & Mey., Ind. Sem. Hort. Petrop. 1:36 (1835); Li in Taiwania 1:76 (1948).

*Digitalis glutinosa* Gaertn. in Nov. Comm. Acad. Sci. Petrop. 14:544, t. 20 (1770).

*Chirita chaneti* Lévl. in Bull. Acad. Géog. Bot. 17: no. 210-211, iii (1907); Li in Taiwania 1:81 (1948).

*Rehmannia chaneti* (Lévl.) Lévl. in Fedde, Rep. Sp. Nov. 9:323 (1911).

CHINA. Hopei (Pé-Tché-Ly), Tchao-Tchao, bord des chemins, bord des puits, tertres, filets des étamines pointillés de pourpre, 7 v 1905, *Chanet* 19 (holo. *C. chaneti*, E).

In his monograph under 'excluded species', Li lists *Rehmannia chaneti* as equalling *Chirita chaneti*.

**1535. *Sopubia trifida*** [Buch.-Ham. ex] D. Don, Prodr. Fl. Nep. 88 (1825); Bonati in Lévl., Fl. Kouy-Tchéou 398 (1915); Lauener in Notes R.B.G. Edinb. 27:265 (1967).

*Linum cavaleriei* Lévl. & Van. in Fedde, Rep. Sp. Nov. 5:9 (1908).

CHINA. Kweichow, environs de Tou-chan, dans la montagne, fl. jaunes, 1 x 1899, *Cavalerie in herb. Bodinier* 2733 (holo. *L. cavaleriei*, E).

*Striga esquirolii* Lévl. = *Canscora diffusa* (Vahl) R. Br. (Gentianaceae).

*Canscora diffusa* was not included in *Gentianaceae* (Part XII) as the type of *Striga esquirolii* had not then been seen.

**1536. *Torenia concolor*** Lindl. in Bot. Reg. 32: t. 62 (1846); Li in Taiwania 9(4):4 (1963).

*T. radicans* Van. in Bull. Acad. Géog. Bot. 15:88 (1905); Bonati in Lévl., Fl. Kouy-Tchéou 399 (1915).

CHINA. Kweichow, environs de Kouy-yang, lieux humides, fleur bleues; item., environs de Tou-chan, 28 vii 1897, *Cavalerie in herb. Bodinier* 1728 (holo. *T. radicans*, E).

**1537. *Verbascum coromandelianum*** (Vahl) O. Kuntze (sphalm. *coromandelicum*) subsp. *sinense* (Lévl. & Giraud.) McKean, **comb. nov.**

*Celsia coromandeliana* Vahl, Symb. Bot. 3:79 (1794).

*Verbascum sinense* Lévl. & Giraud. in Fedde, Rep. Sp. Nov. 12:285 (1913).

*Celsia coromandelianum* Vahl var. *chinensis* Murb. in Lunds Univ. Arsskr. N.F. avd. 2, 22(1):133 (1925).

*Verbascum minus* Lévl. & Giraud. in Lévl., Cat. Pl. Yunnan 266 (1917), nom. nud. pro. syn sub *V. blattaria*.

CHINA. Yunnan, plaine et collines à Kiao-Kia, 400 m, agrimonia vivax, fl. jaunes, v 1912, E. E. Maire s.n. (holo. *V. sinense*, E).

The holotype actually bears the words *Verbascum minus* Lévl. & Giraud. in Léveillé's hand.

**1538. *Veronica arvensis* L.**, Sp. Pl. 13 (1753); Rock in Fedde, Rep. Sp. Nov. 13:359 (1914).

*V. hawaiiensis* Lévl. in Fedde, Rep. Sp. Nov. 10:123 (1911).

HAWAIIAN (SANDWICH) ISLANDS. In herbis Maunakea, 2000 m, vii 1909, Faurie 892 (typus—*V. hawaiiensis*, iso. BM).

**1539. *Veronicastrum cauloptera* (Hance) Yamazaki** in Journ. Fac. Sci. Univ. Tokyo 7:127 (1957).

*Calorhabdos cauloptera* Hance in Journ. Bot. 15:298 (1877); Bonati in Lévl., Fl. Kouy-Tchéou 394 (1915).

*Veronica martinii* Lévl. in Bull. Soc. Agric. Sci. Arts Sarthe 39:325 (1904) & in Fedde, Rep. Sp. Nov. 6:377 (1908).

CHINA. Kweichow, environs de Gan-pin aux grandes rocailles, et dans une dépression profonde en forme de grotte, tiges à branches souvent très allongées fleurs atro-pourpres, item. à Tou-chan, 20 viii 1897, *Martin in herb. Bodinier* 1899 (holo. *V. martinii*, E).

NOTE. At the end of Scrophulariaceae in *Flore du Kouy-Tchéou* Bonati lists *Esquirol* 3016 under 'Indéterminé genre nouveau?'. The meagre specimen under this number has been identified as belonging to Acanthaceae, and somewhat resembles *Justicia glabra*. The solitary flowers are about 1 cm long with winged filaments and the sessile glabrous leaves are about  $2 \times 1$  cm.

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## OROBANCHACEAE

**1540. *Aeginetia mairei*** Lév., Cat. Pl. Yunnan 199 (1916).

CHINA. Yunnan, vallée de Long-Ky, 700 m, plante annuelle à fl. blanches, racines en forme de brindille ramifiée croit sur bois, sur les feuilles mortes, vii 1912, *E. E. Maire* s.n. (holo. E).

As Lévillé remarked in his diagnosis, this species is close to *A. pedunculata* but is much shorter and weaker and with white flowers.

*Mairella yunnanensis* Lév. = ***Mandragora caulescens*** C.B. Cl. (Solanaceae).

**1541. *Orobanche coerulescens*** Steph. in Willd., Sp. Pl. 3:349 (1800); G. Beck in Pflanzenr. 96 (IV. 261):118 (1930); Hand.-Mazz., Symb. Sin. 7:875 (1936).

*O. bodinieri* Lév. in Fedde, Rep. Sp. Nov. 9:451 (1911) & Fl. Kouy-Tchéou 311 (1915).

*O. mairei* Lév. in Fedde, Rep. Sp. Nov. 12:285 (1913) & Cat. Pl. Yunnan 201 (1916).

*O. feddei* Lév. in Fedde, Rep. Sp. Nov. 12:285 (1913) & Cat. Pl. Yunnan 201 (1916).

*O. pycnostachya* Hance var. *yunnanensis* G. Beck in Pflanzenr. 96 (IV. 261):118 (1930).

CHINA. Kweichow, Lo-fou, fl. bleues-viol., iv 1906, *Cavalerie* 2776 (syntype *O. bodinieri*, E); mont. de Hin y hien à Fou, ça-et-là dans la mont., parasite sur les racines d'herbes, fleur bleu pâle, 13 iv 1897, *Bodinier* 1555 (syntype *O. bodinieri*, E). Yunnan, pâturages, coteaux de Mo-tsou, 600 m, plante isolée, sans feuilles, fl. violet noir, vi 1912, *E. E. Maire* s.n. (syntype *O. mairei*, E); pâturages des collines à Mo-tsou, 800 m, sorte d'Orobange, isolée, fl. violet-sombre, v 1912, *E. E. Maire* s.n. (syntype *O. mairei*, E); coteaux dénudés de Ou-nyi-tch'ai, 2550 m, sorte d'Orobange à racines, fl. violet sombre, v 1912, *E. E. Maire* s.n. (holo. *O. feddei*, E).

Handel-Mazzetti placed *O. bodinieri* and *O. mairei* in synonymy under *O. coerulescens* but on the type sheet of *O. feddei* he wrote 'an sp. bona?'. The latter species, however, appears to me to be also conspecific with *O. coerulescens*.

*O. bodinieri*, *O. mairei* and *O. feddei* are listed by Beck under 'Species imperfecte cognitae et dubiae'.

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## LENTIBULARIACEAE

**1542. *Utricularia bifida*** L., Sp. Pl. 18 (1753); Lév., Fl. Kouy-Tchéou 260 (1914).

*Philydrum cavaleriei* Lév. in Bull. Herb. Boiss. sér. 2, 6:506 (1906).

CHINA. Kweichow, Tou-chan, jaune, x 1899, *Cavalerie* s.n. (holo. *Philydrum cavaleriei*, E).

Léveillé cited the Cavalerie specimen under *U. bifida* but did not mention that it was the type of his *P. cavaleriei*.

## GESNERIACEAE

(with B. L. BURTT)

*Aeschynanthus dunnii* Lévl. = *Phlogacanthus pubinervis* T. Anders. (Acanthaceae).

*Aeschynanthus esquirolii* Lévl. = *Exbucklandia populnea* (R. Br. ex Griff.). R. W. Brown (Hamamelidaceae).

**1543. *Ancylostemon mairei*** (Lévl.) Craib in Notes R.B.G. Edinb. 11:267 (1919).

*Didymocarpus mairei* Lévl. in Fedde, Rep. Sp. Nov. 11:301 (1912) & Cat. Pl. Yunnan 123 (1916).

CHINA. Yunnan, rochers de Ma-hong, 3000 m, plante vivace, feuilles charnues-velues, étalées en rosette sur les rochers, sous bois, fleurs jaunes tubulaires, vii 1911, *E. E. Maire* s.n. (holo. E).

**1544. *Ancylostemon notochlaena*** (Lévl. & Van.) Craib in Notes R.B.G. Edinb. 11:266 (1919); Wang in Acta Phytotax. Sin. 13:100 (1975).

*Didissandra notochlaena* Lévl. & Van. in Compt. Rend. Assoc. Franc. 34:425 (1906).

*Didymocarpus notochlaena* (Lévl. & Van.) Lévl. in Compt. Rend. Assoc. Franc. 34:428 (1906).

*Oreocharis notochlaena* (Lévl. & Van.) Lévl. in Fedde, Rep. Sp. Nov. 9:330 (1911) & Fl. Kouy-Tchéou 184 (1914).

CHINA. Kweichow, district de Tsin-gay à Tchao-se, hauts rochers boisés, humides, fleurs jaunes, 7 ix 1899, *Laborde in herb. Bodinier* 2684 (holo. E).

**1545. *Ancylostemon saxatilis*** (Hemsl.) Craib in Notes R.B.G. Edinb. 11:266 (1919).

*Didissandra saxatilis* Hemsl. in Journ. Linn. Soc. (Bot.) 26:227 (1890).

*Didymocarpus saxatilis* (Hemsl.) Lévl. in Compt. Rend. Assoc. Franc. 34:427 (1906).

No Léveillé type is involved.

**1546. *Anna ophiorrhizoides*** (Hemsl.) Burtt & Davidson in Notes R.B.G. Edinb. 21:233 (1955); Burtt in *ibid.* 22:305 (1958).

*Lysionotus ophiorrhizoides* Hemsl. in Journ. Linn. Soc. (Bot.) 26:224 (1890).

*Didymocarpus cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 9:453 (1911) & Fl. Kouy-Tchéou 183 (1914)—non *D. cavaleriei* Lévl. (1906).

*Aeschynanthus* sp.; Rehder in Journ. Arn. Arb. 18:246 (1937).

*Didissandra sinoophiorrhizoides* W. T. Wang in Acta Phytotax. Sin. 13:98 (1975).

CHINA. Kweichow, ouest de Lo-fou, xi 1905, *Cavalerie* 2555 (holo. *Didymocarpus cavaleriei*, E).

*Boea esquirolii* Lévl. & Van. in Bull. Soc. Bot. Fr. 53:551 (1906).

CHINA. Kweichow, Ouang-mou, viii 1903, *Esquirol* 130 (holo-n.v.).



**1547. *Briggsia beauverdiana* (Lévl.) Craib** in Notes R.B.G. Edinb. 11:264 (1919).

*Didissandra beauverdiana* Lévl. in Fedde, Rep. Sp. Nov. 9:328 (1911) & Cat. Pl. Yunnan 123 (1916).

CHINA. Yunnan, Tchen-Fong-Chan, lieux très-ombragés des bois, vi-viii 1894, *Delavay* 5085 (lectotype, E); *Delavay* 5029 (syntype-n.v.).

**1548. *Briggsia elegantissima* (Lévl.) Craib** in Notes R.B.G. Edinb. 11:265 (1919).

*Didissandra elegantissima* Lévl. & Van. in Compt. Rend. Assoc. Franc. 34:425 (1906); Lévl., Fl. Kouy-Tchéou 182 (1914) excl. syn. *D. pinfaensis* Lévl.

*Didymocarpus elegantissima* (Lévl. & Van.) Lévl. in Compt. Rend. Assoc. Franc. 34:428 (1906).

CHINA. Kweichow, Pin-fa, chutes d'eau, 21 viii 1902, *Cavalerie* 239 (syntype, E); environs de Tou-chan, rocaïlles, fleurs rose-pourpre, 24 viii 1899, *Cavalerie* in *Herb. Bodinier* 2686 (syntype, E).

**1549. *Briggsia fritschii* (Lévl. & Van.) Craib** in Notes R.B.G. Edinb. 11:262 (1919).

*Didissandra fritschii* Lévl. & Van. in Compt. Rend. Assoc. Franc. 34:425 (1906).

*Didymocarpus fritschii* (Lévl. & Van.) Lévl. in Compt. Rend. Assoc. Franc. 34:428 (1906).

*Chirita fauriei* auct. non Franch.; Lévl., Fl. Kouy-Tchéou 181 (1914), p.p. quoad *Esquirol* 583.

*Didissandra mihieri* auct. non Franch.; Lévl., Fl. Kouy-Tchéou 182 (1914), p.p. quoad *Laborde* 2464.

CHINA. Kweichow, environs de Tsin gay, mont. du Lion, sur les rochers, 24 x 1898, *Laborde* in *Herb. Bodinier* 2464 (holo *D. fritschii*, E).

**1550. *Briggsia mihieri* (Franch.) Craib** in Notes R.B.G. Edinb. 11:262 (1919).

*Didissandra mihieri* Franch. in Bull. Mens. Soc. Linn. Paris 57:450 (1885); Lévl., Fl. Kouy-Tchéou 182 (1914), p.p.

*Didymocarpus mihieri* (Franch.) Lévl. in Compt. Rend. Assoc. Franc. 34:427 (1906).

No Lévillé type is involved.

**1551. *Briggsia pinfaensis* (Lévl.) Craib** in Notes R.B.G. Edinb. 11:264 (1919).

*Didissandra pinfaensis* Lévl. in Fedde, Rep. Sp. Nov. 9:328 (1911); Lévl., Fl. Kouy-Tchéou 182 (1914) pro syn. sub *D. elegantissima* Lévl. & Van.

CHINA. Kweichow, Pin-fa, rochers humides, 11 viii 1908, *Cavalerie* 3315 (holo. E).

In his *Flore du Kouy-Tchéou* Lévillé placed *D. pinfaensis* in synonymy under *D. elegantissima* but did not cite the type of the former.

**1552. *Briggsia speciosa*** (Hemsl.) Craib in Notes R.B.G. Edinb. 11:264 (1919).

*Didissandra speciosa* Hemsl. in Journ. Linn. Soc. (Bot.) 26:228 (1890).

*Didymocarpus speciosa* (Hemsl.) Lévl. in Compt. Rend. Assoc. Franc. 34:428 (1906).

No Léveillé type is involved.

**1553. *Chirita anachoreta*** Hance in Ann. Sci. Nat. sér. 5, 5:231 (1886); D. Wood in Notes R.B.G. Edinb. 33:164 (1974).

*Didymocarpus anachoreta* (Hance) Lévl. in Compt. Rend. Assoc. Franc. 34:427 (1906).

No Léveillé type is involved.

*Chirita chaneti* Lévl. = ***Rehmannia glutinosa*** (Gaertn.). Libosch. ex Fisch. & Mey. (Scrophulariaceae).

**1554. *Chirita cortusifolia*** Hance in Journ. Bot. 21:324 (1883); D. Wood in Notes R.B.G. Edinb. 33:146 (1974).

*Didymocarpus cortusifolia* (Hance) Lévl. in Compt. Rend. Assoc. Franc. 34:427 (1906).

No Léveillé type is involved.

**1555. *Chirita eburnea*** Hance in Journ. Bot. 21:168 (1883); D. Wood in Notes R.B.G. Edinb. 33:138 (1974).

*Chirita fauriei* Franch. in Bull. Mens. Soc. Linn. Paris 57:450 (1885).

*Didymocarpus eburnea* (Hance) Lévl. in Compt. Rend. Assoc. Franc. 34:427 (1906).

*D. fauriei* (Franch.) Lévl. in Compt. Rend. Assoc. Franc. 34:427 (1906).

No Léveillé type is involved.

**1556. *Chirita juliae*** Hance in Journ. Bot. 21:168 (1883); D. Wood in Notes R.B.G. Edinb. 33:143 (1974).

*Didymocarpus juliae* (Hance) Lévl. in Compt. Rend. Assoc. Franc. 34:427 (1906).

No Léveillé type is involved.

**1557. *Chirita obtusa*** C.B. Cl. in A. DC., Monogr. Phan. 5:114 (1883); D. Wood in Notes R.B.G. Edinb. 33:160 (1974).

*Didymocarpus clarkei* Lévl. in Compt. Rend. Assoc. Franc. 34:427 (1906) (non *Didymocarpus obtusus* Wall.).

No Léveillé type is involved.

**1558. *Chirita pumila*** D. Don, Prodr. Fl. Nep. 90 (1825); D. Wood in Notes R.B.G. Edinb. 33:161 (1974).

*C. sphagnicola* Lévl. & Van. in Bull. Soc. Bot. Fr. 53:550 (1906); Lévl.,

Fl. Kouy-Tchéou 182 (1914), p.p. excl. *Cavalerie* 239 & *Esquirol* 646. CHINA. Kweichow, Ko-tchang-keou, lieux humides et sombres, fleur blanc-violet, viii 1904, *Esquirol* 171 (holo. *C. sphagnicola*, E).

**1559. *Chirita sinensis*** Lindl. in Edward's Bot. Reg. 30: t. 59 (1844); D. Wood in Notes R.B.G. Edinb. 33:135 (1974).

*Didymocarpus sinensis* (Lindl.) Lévl. in Compt. Rend. Assoc. Franc. 34:427 (1906).

*Chirita sinensis* Lindl. var. *bodinieri* Lévl. in Fedde, Rep. Sp. Nov. 9:328 (1911).

HONG KONG. Bois de Happy Valley, rochers de la Cascade, var. à fleurs blanches, 17 vii 1895, *Bodinier* s.n. (holo. var. *bodinieri*, E).

**1560. *Cyrtandra grayana*** Hillebr., Fl. Haw. Isl. 330 (1888); Rock in Fedde, Rep. Sp. Nov. 13:359 (1914) & in Amer. Journ. Bot. 6:55 (1919).

*C. kamoloensis* Lévl. in Fedde, Rep. Sp. Nov. 10:123 (1911).

HAWAIIAN (SANDWICH) ISLANDS. Molokai, Kamolo, vi 1910, *Faurie* 646 (iso. *C. kamoloensis*, BM).

**1561. *Cyrtandra lysiosepala*** (A. Gray) C.B. Cl. var. *fauriei* (Lévl.) Rock in Amer. Journ. Bot. 6:50 (1919).

*C. fauriei* Lévl. in Fedde, Rep. Sp. Nov. 10:123 (1911); Rock in Fedde, Rep. Sp. Nov. 13:359 (1914) pro syn. sub *C. lysiosepala* var.  $\delta$  Hbd.

HAWAIIAN (SANDWICH) ISLANDS. Molokai, Pukoo, v 1910, *Faurie* 632 (iso. *C. fauriei*—BISH, BM).

**1562. *Cyrtandra oahuensis*** Lévl. in Fedde, Rep. Sp. Nov. 10:124 (1911); St. John in B.P. Bishop Mus. Bull. 229:124, f. 45, 46 (1966).

*C. waiolani* auct. non Wawra; Rock in Fedde, Rep. Sp. Nov. 13:359 (1914) & in Amer. Journ. Bot. 6:65 (1919).

HAWAIIAN (SANDWICH) ISLANDS. Oahu, Punaluu, v 1910, *Faurie* 638 (iso. *C. oahuensis*—BM, BISH).

St. John stated that although *C. oahuensis* is the closest relative of *C. waiolani*, the two species are quite distinct.

**1563. *Cyrtandra oenobarba*** Mann in Proc. Am. Acad. Arts Sci. 7:189 (1867); Rock in Fedde, Rep. Sp. Nov. 13:359 (1914).

*C. asaroides* Lévl. in Fedde, Rep. Sp. Nov. 10:124 (1911), p.p.

HAWAIIAN (SANDWICH) ISLANDS. Kauai, Kauhao, ii 1910, *Faurie* 623 (syntype *C. asaroides*, BM).

**1564. *Cyrtandra oenobarba*** Mann var. *petiolaris* Wawra in Flora 55:562 (1872); C.B. Cl. in DC., Monogr. Phan. 5:234 (1883); Rock in Fedde, Rep. Sp. Nov. 13:359 (1914).

*C. asaroides* Lévl. in Fedde, Rep. Sp. Nov. 10:124 (1911), p.p.

HAWAIIAN (SANDWICH) ISLANDS. Kauai, Holokele, iii 1910, *Faurie* 624 (syntype *C. asaroides*, BM).

**1565. *Cyrtandra sandwicensis*** (Lévl.) St. John & Storey in B.P. Bishop Mus. Occ. Papers 20(6):85 (1950); St. John in B.P. Bishop Mus. Bull. 229:81, f. 23–25 (Jan. 1966); Lauener in Notes R.B.G. Edinb. 26:342 (April 1966).

*Viola sandwicensis* Lévl. in Fedde, Rep. Sp. Nov. 11:63 (1912); Rock in Fedde, Rep. Sp. Nov. 13:359 (1914) as *Cyrtandra* sp.?

HAWAIIAN (SANDWICH) ISLANDS. 1910, *Faurie* s.n. (typus *V. sandwicensis*, iso. BISH). The specimen in BISH is marked "Faurie no. 1".

**1566. *Cyrtandra vaniotii*** Lévl. in Fedde, Rep. Sp. Nov. 10:155 (1911); St. John in B.P. Bishop Mus. Bull. 229:290, f. 119 (1966).

*C. garnotiana* auct. non Gaud.; Rock in Fedde, Rep. Sp. Nov. 13:359 (1914) & in Amer. Journ. Bot. 6:205 (1919).

HAWAIIAN (SANDWICH) ISLANDS. Oahu, Kaala, xi 1909, *Faurie* 1144 (iso. BISH).

St. John stated that *C. vaniotii* is a species clearly distinct from *C. garnotiana*.

*Cyrtandra wainihaensis* Lévl. in Fedde, Rep. Sp. Nov. 10:123 (1911); Rock in Fedde, Rep. Sp. Nov. 13:359 (1914); St. John in B.P. Bishop Mus. Bull. 229: 446 (1966)—sub 'excluded species'.

HAWAIIAN (SANDWICH) ISLANDS. Oahu, Wainiha, i 1910, *Faurie* 640 (iso. BM as Kauai, Wainiha).

Neither Rock nor St. John have seen type material. St. John said, '... the plant is probably not from Oahu. There is no locality on Oahu named Wainiha, but there is a well-known one on Kauai, and Faurie is known to have collected there.' It seems obvious that Lévillé merely made a clerical error in citing Oahu instead of Kauai.

**1567. *Dasydesmus bodinieri*** (Lévl.) Craib in Notes R.B.G. Edinb. 11: 254 (1919); Hand.-Mazz., Symb. Sin. 7:877 (1936).

*Oreocharis bodinieri* Lévl. in Bull. Acad. Géog. Bot. 25:40 (1915) & Cat. Pl. Yunnan 124 (1916).

CHINA. Yunnan, rochers, pied du pic Io-chan, 3100 m, primulacée vivace, tomenteuse, fl. jaune d'ocre, x 1913, *E. E. Maire* s.n. (holo. E).

**1568. *Didissandra begoniifolia*** Lévl. in Fedde, Rep. Sp. Nov. 11: 495 (1913) & Fl. Kouy-Tchéou 182 (1914); B. L. Burtt in Notes R.B.G. Edinb. 23:100 (1960).

*Loxostigma begoniifolia* (Lévl.) Anth. in Notes R.B.G. Edinb. 18:199 (1934).

CHINA. Kweichow, route de Po-Mey-Tse-Hen, fleur rosée panachée violet, viii 1906, *Esquirol* 972 (holo. *D. begoniifolia*, E).

**1569. *Didissandra sesquifolia*** C.B. Cl. in Hook., Ic. Pl. 18: t. 1797 (1888); B. L. Burtt in Notes R.B.G. Edinb. 26:264 (1965).

*Didymocarpus sesquifolia* (C.B. Cl.) Lévl. in Compt. Rend. Assoc. Franc. 34: 428 (1906).

No Lévillé type is involved.

*Didissandra stolonifera* Lévl. & Van. = *Mazus longipes* Bonati (Scrophulariaceae).

**1570. *Didymocarpus hemsleyanus*** Lévl. in Compt. Rend. Assoc. Franc. 34:426 (1906).

*D. sp. nov.* Hemsl. in Journ. Linn. Soc. (Bot.) 26:231 (1890).  
CHINA. Kwangtung, sine loc. *Ford* 132 (holo. K—n.v.).

**1571. *Didymocarpus macrosiphon*** (Hance) Lévl. in Compt. Rend. Assoc. Franc. 34:427 (1906).

*Chirita macrosiphon* Hance in Ann. Sci. Nat. sér. 5, 5:231 (1866).

The generic position of this taxon is still uncertain.

**1572. *Didymocarpus stenanthos*** C.B. Cl. in Hook., Icon. 18. t. 1799 (1888); Hand.-Mazz., Symb. Sin. 7:880 (1936).

*Oreocharis micrantha* Lévl. in Bull. Acad. Géog. Bot. 25:24 (1915) & Cat. Pl. Yunnan 124 (1916).

CHINA. Yunnan, rochers de Li-tse-pin, 800 m, plante vivace, tomenteuse, fl. violettes, vii 1911, *E. E. Maire* s.n. (holo. *O. micrantha*, E).

**1573. *Didymocarpus violaceus*** Lévl. in Fedde, Rep. Sp. Nov. 11:302 (1912) & Fl. Kouy-Tchéou 183 (1914).

CHINA. Kweichow, enfoncement Ouen-ly près Thou-ly, violette, ainsi que le dessous de feuilles, 1 iv 1911, *Esquirol* 2594 (holo. E).

The type specimen contains old fruit only and the generic position is doubtful.

**1574. *Hemiboea cavaleriei*** Lévl. in Fedde, Rep. Sp. Nov. 9:328 (1911) & Fl. Kouy-Tchéou 183 (1914).

*H. esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 9:329 (1911) & Fl. Kouy-Tchéou 183 (1914).

CHINA. Kweichow, Pin-fa, fl. blanc, intérieurement rayée et pointillée de pourpre, 16 ix 1902, *Cavalerie* 492 (holo. *H. cavaleriei*, E); Chei-chen de Lao-ten (?), cette fleur est dans un sac rempli d'eau, fleur blanche, vi 1904, *Esquirol* 91 (holo. *H. esquirolii*, E).

**1575. *Hemiboea himalayensis*** Lévl. in Fedde, Rep. Sp. Nov. 9: 329 (1911).  
SIKKIM-HIMALAYA. Kishap, Mongpoo, 600-900 m, v-vii 1884.

No collector was cited and there is only a drawing of *H. himalayensis* in E.

**1576. *Hemiboea subcapitata*** C.B. Cl. in Hook., Icon. 18: t. 1798 (1888).

*H. marmorata* Lévl. in Fedde, Rep. Sp. Nov. 9:454 (1911) & Fl. Kouy-Tchéou 183 (1914).

CHINA. Kweichow, Pin-fa, fl. blanches pourprées, ix 1908, *Cavalerie* 3625 (holo. *H. marmorata*, E).

**1577. *Loxostigma cavaleriei*** (Lévl. & Van.) B. L. Burtt in Notes R.B.G. Edinb. 22: 310 (1958) & 34:104 (1975).

*Didissandra cavaleriei* Lévl. & Van. in Compt. Rend. Assoc. Franc. 34:425 (1906).

*Didymocarpus cavaleriei* (Lévl. & Van.) Lévl. in Compt. Rend. Assoc. Franc. 34:427 (1906)—non *Didymocarpus cavaleriei* Lévl. (1911).

*Briggsia cavaleriei* (Lévl. & Van.) Craib in Notes R.B.G. Edinb. 11: 263 (1919).

CHINA. Kweichow, Pin-fa, fl. blanches pourprées, 21 viii 1902, *Cavalerie* 239 (holo. E).

*Lysionotus cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 6:264 (1909)—non Lévl. (1911).

CHINA. Kweichow, sine loc., *Cavalerie*, s.n. (holo. *L. cavaleriei*—n.v.).

As noted by Rehder *Lysionotus cavaleriei* Lévl. (1909) is probably not a *Lysionotus*. The type specimen has not yet been found.

**1578. *Lysionotus pauciflorus* Maxim. var. *linearis* Rehder in Journ. Arn. Arb. 18:246 (1937).**

*L. cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 9:328 (1911) & Fl. Kouy-Tchéou 184 (1914)—non Lévl. (1909).

CHINA. Kweichow, Pin-fa, rochers, 11 x 1905, *Cavalerie* 2531 (holo. *L. cavaleriei* (1911) & *L. pauciflorus* var. *linearis*, E).

**1579. *Lysionotus serratus* D. Don in Edin. Phil. Journ. 7:86 (1822); B. L. Burtt in Notes R.B.G. Edinb. 22:311 (1958); Wang in Acta Phytotax. Sin. 13:69 (1975).**

*Didymocarpus esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 9: 328 (1911) & Fl. Kouy-Tchéou 183 (1914).

CHINA. Kweichow, route Tse-Hen à Fou-Kia-Po, rochers montueux, fleur blanche panachée, violet bleu, viii 1906, *Esquirol* 941 (holo. *D. esquirolii*, E).

**1580. *Opithandra primuloides* (Miquel) B. L. Burtt in Baileya 4:162 (1956) & in Notes R.B.G. Edinb. 22:303 (1958).**

*Oreocharis primuloides* (Miq.) C.B. Cl. in DC. Mon. Phan. 5(1):63 (1883); Lévl. in Fedde, Rep. Sp. Nov. 9:330 (1911).

No Léveillé type is involved and Léveillé's transfer to *Oreocharis primuloides* was predated by that of C. B. Clarke.

**1581. *Oreocharis cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 7:258 (1909), Fl. Kouy-Tchéou 184 (1914) & Cat. Pl. Seu-Tchouen, t. 41 (1918).**

CHINA. Kweichow, Ma-jo, un endroit seulement, 5 ix 1907, *Cavalerie* 3153 (holo. E).

**1582. *Oreocharis esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 9:329 (1911) & Fl. Kouy-Tchéou 184 (1914)—non Lévl. in Fedde, Rep. Sp. Nov. 9:447 (1911).**

CHINA. Kweichow, Hoa-ouan-sao, rochers humides, fleur violette, viii 1905, *Esquirol* 628 (holo. E).

**1583. *Oreocharis henryana* Oliv. in Hook., Icon. Pl. 20: t. 1944 (1890).**

*O. squamigera* Lévl. in Bull. Acad. Géog. Bot. 25: 24 (1915) & Cat. Pl. Yunnan 124 (1916).

CHINA. Yunnan, rochers de Tse-tchou-pa, 800 m, plante vivace, feuil. charnues, brunes et velues endessous, fl. blanches, viii 1912, *E. E. Maire* s.n. (syntype *O. squamigera*, E); plateau de Sen-kia-leang-tse, 2800 m, rochers sous brousse, plante vivace, feuil. rudes, tomenteuses et grises endessous, vii 1912, *E. E. Maire* s.n. (syntype *O. squamigera*, E).

**1584. *Oreocharis leveilleana*** Fedde in Fedde, Rep. Sp. Nov. 10:64 (1911); Lévél., Fl. Kouy-Tchéou 185 (1914)—'leveillei'.

*O. esquirolii* Lévél. in Fedde, Rep. Sp. Nov. 9:447 (1911)—non Lévél. in *ibid.* 9:329 (1911).

CHINA. Kweichow, Ta-pin, rochers, 1200 m, fleurs passées depuis longtemps, iii 1910, *Esquirol* 2051 (holo. *O. leveilleana*, *O. esquirolii*, E).

**1585. *Oreocharis sericea*** (Lévél.) Lévél. in Fedde, Rep. Sp. Nov. 9: 329 (1911) & Fl. Kouy-Tchéou 185 (1914).

*Didymocarpus sericeus* Lévél. in Compt. Rend. Assoc. Franc. 34:427 (1906).

*Chirita sericea* Lévél. & Van. in Compt. Rend. Assoc. Franc. 34:428 (1906); Hand.-Mazz., Symb. Sin. 876 (1936)—non Ridl. (1905).

CHINA. Kweichow, environs de Tou-chan, sous les rochers, fleurs violettes, 24 viii 1899, *Cavalerie in herb. Bodinier* 2687 (holo. *Chirita sericea* and *Oreocharis sericea*, E).

As *Chirita sericea* was illegitimate, *Didymocarpus sericeus* cannot be based on it as a *comb. nov.* but stands as an independent name.

*O. sericea* was based on *C. sericea* Lévél. & Van. non Ridl. and Lévélle wrote it as a new name, not a combination, but he forgot to mention his earlier *D. sericeus*, which is homotypic. The name should therefore be *O. sericea* (Lévél.) Lévél.: its type is that of *C. sericea* and there are therefore, no independent syntypes of *Oreocharis sericea*.

**1586. *Ornithoboea feddei*** (Lévél.) B. L. Burtt in Notes R.B.G. Edinb. 22:296 (1958).

*Boea feddei* Lévél. in Fedde, Rep. Sp. Nov. 9:449 (1911).

*B. darrissii* Lévél. in Fedde, Rep. Sp. Nov. 11:494 (1913) & Fl. Kouy-Tchéou 180 (1914).

*Ornithoboea darrissii* (Lévél.) Craib in Notes R.B.G. Edinb. 11:252 (1919).

CHINA. Kweichow, sine loc., *Esquirol* 730 (holo. *B. feddei* & *B. darrissii*, E).

**1587. *Paraboea martinii*** (Lévél.) B. L. Burtt, *comb. nov.*\*

*Didymocarpus martini* Lévél. & Van. in Compt. Rend. Assoc. Franc. 34:426 (1906).

*Boea martini* (Lévél.) Lévél., Fl. Kouy-Tchéou 180 (1914), *in clavi*.

CHINA. Kweichow, environs de Gan-pin, rochers à l'entrée d'une grotte, belles fleurs bleues, 13 vi 1898, *Martin in herb. Bodinier* 2378 (holo. E).

\* A long paper re-modelling the genus *Boea* and its allies is in press. The results must be anticipated here in order that Lévélle plants may be correctly re-determined. So far as it affects this paper the essence of the revision is that species with an arachnoid indumentum of interwoven (often branched) hairs are placed in *Paraboea*, whether the fruit be straight or twisted. *Boea* is restricted to plants with an indumentum of simple strigose or silky hairs.



**1588. *Paraboea rufescens* (Franch.) B. L. Burtt, comb. nov.***Boea rufescens* Franch. in Bull. Soc. Linn. Paris 1:449 (1885).*Didymocarpus seguini* Lévl. & Van. in Compt. Rend. Assoc. Franc. 34:427 (1906).*Boea rufescens* Franch. var. *seguini* (Lévl.) Lévl., Fl. Kouy-Tchéou 181 (1914), p.p.CHINA. Kweichow, cascade de Hoang-ko-chou, sur les rochers, fleurs pourpre-violacé, 9 vi 1898, *Seguin in herb. Bodinier* 2377 (holo. *D. seguini*, E).Although Léveillé did not cite *D. seguini* as a basionym in Flore du Kouy-Tchéou, he did cite the type specimen.**1589. *Paraboea sinensis* (Oliv.) B. L. Burtt, comb. nov.***Phylloboea sinensis* Oliv. in Hook., Ic. Pl. 18: t. 1721 (1887).*Boea chaffanjonii* Lévl. in Fedde, Rep. Sp. Nov. 9:330 (1911) & Fl. Kouy-Tchéou 180 (1914).*Chlamydoboea sinensis* (Oliv.) Stapf in Kew Bull. 1913:355 (1913).CHINA. Kweichow, environs de Kouy-yang, mont. du Collège, hauts rochers au dessus du Ke-ma-tong, belles fleurs rosées, 9 v 1898, *Chaffanjon in herb. Bodinier* 2312 (holo. *B. chaffanjonii*, E).**1590. *Paraboea thirionii* (Lévl.) B. L. Burtt, comb. nov.***Boea thirionii* Lévl. in Fedde, Rep. Sp. Nov. 11:301 (1912) & Fl. Kouy-Tchéou 181 (1914).CHINA. Kweichow, Gny-Ken, chemin de la source, vii 1911, *Esquirol* 2699, (holo. E).**1591. *Petrocodon* sp.***Didymocarpus nigrescens* Lévl. & Van. in Bull. Soc. Bot. Fr. 53:550 (1906); Lévl., Fl. Kouy-Tchéou 183 (1914); B. L. Burtt in Notes R.B.G. Edinb. 22:314 (1958), in obs.CHINA. Kweichow, Tou-chan, route de Houang-tien, i 1903, *Cavalerie* 2056 (holo. *D. nigrescens*, E).**1592. *Petrocosmea cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 9:329 (1911) & Fl. Kouy-Tchéou 185 (1914), p.p. excl. *Cavalerie* 837; Craib in Notes R.B.G. Edinb. 11:273 (1919).**

CHINA. Yunnan, rochers des mont. à Tcha-ho, 2600 m, plante vivace, tomenteuse, feuil. molles, cassantes en rosette, fl. bleues, viii 1912 (holo. E).

**1593. *Petrocosmea mairei* Lévl. in Bull. Acad. Géog. Bot. 25:24 (1915) & Cat. Pl. Yunnan 125 (1916); Craib in Notes R.B.G. Edinb. 11:274 (1919).**

CHINA. Yunnan, rochers des mont. à Tcha-ho, 2600 m, plante vivace, tomenteuse, feuil. molles, cassantes en rosette, fl. bleues, viii 1912 (holo. E).

**1594. *Petrocosmea martinii*** (Lévl.) Lévl. in Fedde, Rep. Sp. Nov. 9:329 (1911) & Fl. Kouy-Tchéou 185 (1914); Craib in Notes R.B.G. Edinb. 11:275 (1919).

*Vaniotia martini* Lévl. in Bull. Acad. Géog. Bot. 12:166 (1903); Lévl. in Compt. Rend. Assoc. Franc. 34:426 (1906), *p.p. pro syn. sub P. sinensis* Oliv.

*P. cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 9:329 (1911) & Fl. Kouy-Tchéou 185 (1914) *p.p. quoad Cavalerie* 837.

CHINA. Kweichow, environs de Gan-Pin, sur les parois du Ta-tong, belles fleurs bleues, vi 1899, *Martin in herb. Bodinier* 2683 (holo. *P. martinii*, E); Long-ly, grottes, fl. violettes, 13 vi 1902, *Cavalerie* 837 (syntype *P. cavaleriei*, E).

Under *P. sinensis* Oliv., Lévillé (l.c. 1906) cited *Vaniotia martini* in synonymy including *Martin* 1907 & 2683 and *Cavalerie* 837.

**1595. *Rhabdothamnopsis sinensis*** Hemsl. in Journ. Linn. Soc. (Bot.) 35:517 (1903).

*Streptocarpus chinensis* Franch. in Bull. Mus. d'Hist. Nat. Paris 5:252 (1899).

*Boea cavaleriei* Lévl. & Van. in Compt. Rend. Assoc. Franc. 34:429 (1906); Lévl., Fl. Kouy-Tchéou 180 (1914).

*Boea rubicunda* Lévl. in Bull. Acad. Géog. Bot. 25:24 (1915) & Cat. Pl. Yunnan 123 (1916).

*Rhabdothamnopsis chinensis* (Franch.). Hand.-Mazz., Symb. Sin. 7:884 (1936); Rehder in Journ. Arn. Arb. 18:246 (1937).

CHINA. Kweichow, environs de Tou-Chan, fleurs bleues, labelle pointillé avec tache blanche, fruit sec en spirale, 2 vi 1898; item, route de Pin-Gue à Kouy-yang, 18 v 1899 (*L. Martin*), *Cavalerie in herb. Bodinier* 2347 (holo. *B. cavaleriei*). Yunnan, collines arides de Pan-pien-kai, 2550 m, Bignoniaceae arbrisseau, vii 1912, *E. E. Maire* s.n. (holo. *B. rubicunda*, E).

**1596. *Rhynchotechum obovatum*** (Griff.) B. L. Burtt in Notes R.B.G. Edinb. 24:38 (1962).

*Chiliandra obovata* Griff., Notulae 4:150 (1854) & Ic. Pl. As. t. 438 (1854).

*Cyrtandra hillii* Lévl. in Fedde, Rep. Sp. Nov. 10:145 (1911) & Fl. Kouy-Tchéou 182 (1914).

CHINA. Kweichow, Lo-pou, x 1908, *Cavalerie* 3529 (holo. *C. hillii*, E).

**1597. *Streptocarpus clarkeanus*** (Hemsl.) Hilliard & Burtt, Streptocarpus, an African plant study 373 (1971).

*Boea clarkeana* Hemsl. in Journ. Linn. Soc. (Bot.) 26:232 (1890); B. L. Burtt in Notes R.B.G. Edinb. 22:306 (1958).

*B. mairei* Lévl. in Fedde, Rep. Sp. Nov. 12:286 (1913) & Cat. Pl. Yunnan 123 (1916).

CHINA. Yunnan, pied des mont. à La-Kou, 2400 m, rochers inaccessibles au soleil, Begoniaceae vivace, feuil. molles, laineuses, très caduques, vii 1912, *E. E. Maire* s.n. (holo. *B. mairei*, E).

1598. *Trema mairi* Craib in Notes R.B.G. Edinb. 10:218 (1918).

?*Oreocharis mairi* Lévl. in Fedde, Rep. Sp. Nov. 11:301 (1912) & Cat. Pl. Yunnan 124 (1916).

CHINA. Yunnan, rochers sous bois, est de Tong-tchouan, 2550 m, plante vivace, feuilles charnues, ciliées, fleurs blanches, tubulaires, vi 1911, *E. E. Maire* s.n. (holo. *O. mairi*, E).

When Craib described *T. mairi* he placed *O. mairi* as a doubtful synonym. The type specimens of the two species are different; Craib's name was not a new combination.

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#### BIGNONIACEAE

*Incarvillea argyi* Lévl. = *Ipomoea quamoclit* L. (Convolvulaceae).

1599. *Incarvillea mairi* (Lévl.) Grierson var. *mairi* in Notes R.B.G. Edinb. 23: 342 (1961).

*Tecoma mairi* Lévl., Cat. Pl. Yunnan 20 (1915); Rehder in Journ. Arn. Arb. 16:315 (1935), pro syn. sub *Incarvillea delavayi*.

*Tecoma cavaleriei* Lévl. = *Staphylea holocarpa* Hemsl. (Sapindaceae).

#### PEDALIACEAE

1600. *Sesamum indicum* L., Sp. Pl. 634 (1753).

*Strobilanthes gentiliana* Lévl. in Bull. Soc. Agric. Sci. Arts Sarthe 44:479, 480 (1914) & Fl. Kouy-Tchéou 22 (1914).

CHINA. Kweichow, la rivière Leoo mie, blanche, 20 iv 1907, *Cavalerie* 3191 (holo. *S. gentiliana*, E).

The type was first determined as *S. indicum* by E. Hossain.

1601. *Trapella sinensis* Oliver in Hook., Icon. Pl. 16: t. 1595 (1887); Nakai in Bull. Nat. Sci. Mus. Tokyo no. 31:104 (1952); Ohwi, Fl. Jap. (Engl. ed.) 810 (1965).

*Trapa antennifer* Lévl. in Bull. Acad. Géog. Bot. 8:229 (1899), 9:212 (1900) & 12: t. 13 (1903).

*Trapella antennifer* (Lévl.) Glück. in Bot. Jahrb. 70:149 (1939), 71:331 (1940); Tralau in Bot. Notiser 117:119 (1964) & 118:21-24 (1965).

*Trapella sinensis* Oliver var. *antennifera* (Lévl.) Hara in Journ. Jap. Bot. 17:382 (1941) & Enum. Sperm. Jap. 1:285 (1948).

*Trapella sinensis* Oliver f. *antennifera* (Lévl.) Kitagawa in Journ. Jap. Bot. 41:370 (1966).

JAPAN. Nigata, fossés, étangs, 24 ix 1898, *Faurie* 1342 (holo. *Trapa antennifer*, E).

#### ACANTHACEAE

(A. B. M. ENAYET HOSSAIN\*)

**1602. *Aechmanthera gossypina*** (Nees) Nees in Wall., Pl. As. Rar. 3:87 (1832); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2, sect. 41(1):149 (1944).

*Ruellia gossypina* Nees in Wall., Pl. As. Rar. 1:38, t. 42 (1830).

*Strobilanthes cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 12:18 (1913) & Fl. Kouy-Tchéou 21 (1914), p.p.

*S. blinii* Lévl. in Fedde, Rep. Sp. Nov. 12: 19 (1913) & Fl. Kouy-Tchéou 21 (1914); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2, sect. 41(1):271 (1944).

*S. bodinieri* Lévl. in Fedde, Rep. Sp. Nov. 12:19 (1913) & Fl. Kouy-Tchéou 21 (1914); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2, sect. 41(1):271 (1944).

CHINA. Kweichow, Lo-Fou, x 1908, *Cavalerie* 3621 (syntype *S. cavaleriei*, E); route de Shin-Gny-Fou à Tchen-Fong, viii 1905, *Esquirol* 767 (syntype *S. blinii*, E); Lo-Fou, dans les herbes des montagnes, fl. violettes, xi 1905, *Cavalerie* 2685 (syntype *S. blinii*, E); sous-prefecture de Tchen-Lin-tchéou, route de Lo Pie à Ou-La-Gay, dans les herbes de la mont., fleurs bleues, 9 x 1897, *Martin* in herb. *Bodinier* 1931 (holo. *S. bodinieri*, E).

There is another specimen of *Cavalerie* 2685 which is *Barleria cristata* (q.v.). Two other syntypes of *Strobilanthes cavaleriei* belong to *Gutzlaffia aprica* (q.v.).

**1603. *Barleria cristata*** L., Sp. Pl. 636 (1753); Lévl., Fl. Kouy-Tchéou 18 (1914) & Cat. Pl. Yunnan 5 (1915); Tingle, Check List of Hong Kong Plants 50 (1967).

*B. cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 12:21 (1913).

*B. mairei* Lévl. in Fedde, Rep. Sp. Nov. 12:285 (1913); Hand.-Mazz., Symb. Sin. 7:897 (1936).

*B. cristata* L. var. *mairei* (Lévl.) Lévl., Cat. Pl. Yunnan 5 (1915).

CHINA. Kweichow, Lo-Fou, route de Pien-Yang, fl. viol., xi 1905, *Cavalerie* 2685 (syntype *B. cavaleriei*, E, K); sine loc., *Esquirol* 887 (syntype *B. cavaleriei*, E). Yunnan, rives du fleuve Bleu, 400 m, plante vivace, sous ligneuse, toujours verte, en touffes dressées, fl. bleues, v 1912, *E. E. Maire* s.n. (holo. *B. mairei*, E).

*Barleria crotalaria* Lévl. = *Morina delavayi* Franch. (Dipsacaceae).

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**1604. *Championella coreana*** (Lévl.) E. Hossain in Notes R.B.G. Edinb. 32:405 (1973).

*Strobilanthes coreanus* Lévl. in Fedde, Rep. Sp. Nov. 12:19 (1913);

Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):272 (1944).

KOREA. In herbis Quelpaert, x 1906, *Faurie* 917 (lecto. E); Quelpaert in humidis sylvarum, ix 1909, *Taquet* 3105 (syntype, E); Quelpaert in herbis Hongno, Cascade, 22 ix 1908, *Taquet* 1247 (syntype, E); Quelpaert O. in sylvis, 700 m, 23 ix 1910, *Taquet* 4385 (syntype, E); Quelpaert in sylvis Hallaisan, Haïtchenom, 1000 m, 20 x 1908, *Taquet* 1246 (syntype, E).

**1605. *Championella japonica*** (Thunb.) Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):150 (1944).

*Ruellia japonica* Thunb., Fl. Jap. 254 (1784).

*Strobilanthes japonicus* (Thunb.) Miq. in Ann. Mus. Bot. Lugd.-Bat. 2:124 (1865).

*S. bonatianus* Lévl. in Fedde, Rep. Sp. Nov. 12:20 (1913) & Fl. Kouy-Tchéou 21 (1914); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):271 (1944).

CHINA. Kweichow, Hoang-Tsao-Pa, ruisseaux, vi 1909, *Esquirol* 1553 (holo. *S. bonatianus*, E).

**1606. *Championella labordei*** (Lévl.) E. Hossain in Notes R.B.G. Edinb. 32:405 (1973).

*Strobilanthes labordei* Lévl. in Fedde, Rep. Sp. Nov. 12:20 (1913); Lévl.,

Fl. Kouy-Tchéou 22 (1914) pro syn. sub *S. radicans* Anders; Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):278 (1944).

*Acanthopale labordei* (Lévl.) Hand.-Mazz. in Sinensia 5:20 (1934).

CHINA. Kweichow, Mont. de Kao-Po (Tsin-Gay) sur un vieux mur mousseux, fleurs bleues, 11 ix 1899, *Laborde in herb. Bodinier* 2693 (lecto. E); Pin-Fa, fl. bleue-violette, 26 viii 1902, *Cavalerie* 323 (syntype E).

Léveillé (Fl. Kouy-Tchéou 22, 1914) considered this species to be synonymous with *S. radicans* [T. Anders. ex] Benth. (= *Championella tetrasperma* (Champ. ex Benth.) Brem.). No doubt *C. labordei* is allied to *C. tetrasperma* but the former is distinctive in its weak straggling habit, lesser number of flowers, and in its pubescence.

**1607. *Cystacanthus yangtsekiangensis*** (Lévl.) Rehder in Journ. Arn. Arb. 16:315 (1935).

*Strobilanthes yangtsekiangensis* Lévl., Cat. Pl. Yunnan 7 (1915).

CHINA. Yunnan, rives du fleuve Bleu, 400 m, plante sous ligneuse, en touffes dressées, fl. bleues, v 1912, *E. E. Maire* s.n. (syntype E); rives du fleuve Bleu à Ta-chai, 450 m, plante vivace, sous-ligneuse, en touffes, fl. roses, *E. E. Maire* s.n. (syntype E).

**1608. *Goldfussia chaffanjonii*** (Lévl.) E. Hossain in Notes R.B.G. Edinb. 32:406 (1973).

*Strobilanthes chaffanjonii* Lévl. in Fedde, Rep. Sp. Nov. 12:20 (1913) &

Fl. Kouy-Tchéou 21 (1914) p.p.; Brem. in Verh. Ned. Akad. Wet., Nat. Afd. 2 sect. 41(1):272 (1944).

CHINA. Kweichow, environs de Kouy-Yang, mont. du Collège; gorges de

Yang-pa, fleurs violettes, 20 viii 1898, *Chaffanjon in herb. Bodinier* 1797D (lecto. E).

For other types of *S. chaffanjonii* see *Goldfussia pentstemonoides* Nees.

**1609. *Goldfussia equitans* (Lévl.) E. Hossain in Notes R.B.G. Edinb. 32:406 (1973).**

*Strobilanthes? equitans* Lévl. in Fedde, Rep. Sp. Nov. 12:20 (1913); Lévl., Fl. Kouy-Tchéou 21 (1914), pro syn. sub *S. chaffanjonii* Lévl.; Brem. in Verh. Ned. Akad. Wet., Nat. Afd. 2 sect. 41(1):274 (1944). CHINA. Kweichow, Ma-jo, 5 ix 1907, *Cavalerie* 3211 (holo. E).

**1610. *Goldfussia feddei* (Lévl.) E. Hossain in Notes R.B.G. Edinb. 32:407 (1973).**

*Strobilanthes feddei* Lévl. in Fedde, Rep. Sp. Nov. 12:20 (1913) & Cat. Pl. Yunnan 6 (1915); Hand.-Mazz., Symb. Sin. 7:892 (1936); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):275 (1944). CHINA. Yunnan, route de Mong-Tse à Yunnan-sen, pied des rochers au bord de la route, au col de Koan-Yu-Chan, fleurs rosacées violacées, 27 x 1896, *Bodinier* s.n. (holo. E).

A species which is distinct by its rhomboid-acute,  $\pm$  glabrous subcrenulate leaves, broad calyx lobes with glandular and eglandular hairs, and thin, elliptic-obtuse, pinkish bracts.

**1611. *Goldfussia mahongensis* (Lévl.) E. Hossain in Notes R.B.G. Edinb. 32:407 (1973).**

*Strobilanthes "makongensis"* Lévl., Cat. Pl. Yunnan 6 (1915); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):280 (1944). CHINA. Yunnan, pâturages des montagnes à Ma-hong, 2800 m, scrofulariée vivace en touffes dressées, haut Om. 80, fl. roses, viii 1912, *E. E. Maire* s.n. (holo. E).

Distinctive in its elongated, much longer spike and broadly elliptic-ovate, acute, pinkish bracts.

**1612. *Goldfussia pentstemonoides* Nees in Wall., Pl. As. Rar. 3:88 (1832); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):232 (1944).**

*Strobilanthes pentstemonoides* (Nees) T. Anders. in Journ. Linn. Soc. (Bot.) 9:477 (1867).

*S. marchandii* Lévl. in Fedde, Rep. Sp. Nov. 12:19 (1913); Lévl., Fl. Kouy-Tchéou 21 (1914) pro syn. sub *S. chaffanjonii*; Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):280 (1944).

*S. chaffanjonii* Lévl. in Fedde, Rep. Sp. Nov. 12:20 (1913) & Fl. Kouy-Tchéou 21 (1914), p.p.; Brem. in Verh. Ned. Akad. Wet. Nat. Afd. 2 sect. 41(1):272 (1944).

CHINA. Kweichow, Hong-Tong, fleur lavée de rose, i 1906, *Esquirol* 722 (holo. *S. marchandii*, E); environs de Gan-Pin, belle fleur violette, 10 viii 1897, *Martin in herb. Bodinier* 1797 (syntype *S. chaffanjonii*, E). Item., environs de Tsin-Gay à Kia-La-tchong, 24 xi 1898, *Laborde* s.n. (syntype *S. chaffanjonii*, E).

**1613. *Gutzlaffia aprica*** Hance in Hook., Journ. Bot. & Kew Gard. Misc. 1:142 (1849); Brem. in Verh. Ned. Akad. Wet., Nat. Afd. 2 sect. 41(1):155 (1944).

*Phlebophyllum apricum* (Hance) Benth. in Hook., Journ. Bot. & Kew Gard. Misc. 5:131 (1853).

*Strobilanthes aprica* (Hance) T. Anders. ex Benth., Fl. Hongk. 262 (1861); Tingle, Check List of Hong Kong Pl.:51 (1967).

*S. cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 12:18 (1913) & Fl. Kouy-Tchéou 21 (1914), p.p.; Brem. in Verh. Ned. Akad. Wet., Nat. Afd. 2 sect. 41(1):272 (1944).

*S. cavaleriei* Lévl. var. *angustifolia* Lévl. in Fedde, Rep. Sp. Nov. 12:18 (1913) & Fl. Kouy-Tchéou 21 (1914); Brem. in Verh. Ned. Akad. Wet., Nat. Afd. 2 sect. 41(1):272 (1944).

*S. dielsiana* W. W. Sm. in Notes R.B.G. Edinb. 8:207 (1914).

*S. mairei* Lévl., Cat. Pl. Yunnan 6 (1915); Brem. in Verh. Ned. Akad. Wet., Nat. Afd. 2 sect. 41(1):280 (1944).

*Gutzlaffia dielsiana* (W. W. Smith) S. Moore in Journ. Bot. 63:167 (1925); Brem. in Verh. Ned. Akad. Wet., Nat. Afd. 2 sect. 41(1):155 (1944).

CHINA. Kweichow, Lo-Fou, *Esquirol* 807 (syntype *S. cavaleriei*, E); district de Tse-Hen-Tchéou, frontière de Kouang-Sy, fleurs bleues, viii 1899, *Esquirol in herb. Bodinier* 2694 (syntype *S. cavaleriei*, E); Hin-Gny-Hien, xi 1906, *Esquirol* 1055 (holo. *S. cavaleriei* var. *angustifolia*, E). Yunnan, pâtures des mont. à Tong-Tchouan, 2600 m, scrofulariée vivace, en touffes dressées, fl. bleus, vi 1912, *E. E. Maire* s.n. (holo. *S. mairei*, E).

*Cavalerie* 3621, a syntype of *S. cavaleriei*, and *Esquirol* 3020, cited under *S. cavaleriei* in *Flore du Kouy-Tchéou*, belong to *Aechmanthera gossypina* (q.v.).

There are two forms of *Gutzlaffia aprica*, one with small, narrowly lanceolate leaves and the other with larger, elliptic-lanceolate leaves. Plants are also variable in the nature of pubescence, stature and corolla colour. As these forms also intergrade, varietal classification has not been attempted.

**1614. *Gutzlaffia lyi*** (Lévl.) E. Hossain in Notes R.B.G. Edinb. 32:407 (1973).

*Ruellia lyi* Lévl. in Fedde, Rep. Sp. Nov. 12:21 (1913) & Fl. Kouy-Tchéou 20 (1914).

CHINA. Kweichow, rochers sous bois, Tin-Fan, fl. blanches, xi 1904, *Cavalerie* 1888 (holo. *Ruellia lyi*, E).

**1615. *Justicia kouytcheensis*** (Lévl.) E. Hossain in Notes R.B.G. Edinb. 32:407 (1973).

*Ruellia repens* L. var. *kouytcheensis* Lévl. in Fedde, Rep. Sp. Nov. 13:175 (1914) & Fl. Kouy-Tchéou 20 (1914).

CHINA. Kweichow, Gan-Chouen, 1912, *Cavalerie* 3979 (holo. E).

**1616. *Pararuellia cavaleriei*** (Lévl.) E. Hossain in Notes R.B.G. Edinb. 32:409 (1973).

*Ruellia cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 12:21 (1913) & Fl. Kouy-Tchéou 20 (1914) & Cat. Pl. Yunnan 6 (1915).



CHINA. Kweichow, I-Long-Ho (rivière sud de Lo-Fou), iv 1907, *Cavalerie* 3293 (holo. E).

**1617. *Pararuellia delavayana*** (Baill.) E. Hossain in Notes R.B.G. Edinb. 32:409 (1973).

*Ruellia delavayana* Baill., Hist. des Pl. 10:408 (1891).

*Ruellia esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 12:21 (1913); Lévl., Fl.

Kouy-Tchéou 20 (1914), pro syn. sub *Ruellia flagelliformis* Roxb.

CHINA. Kweichow, Ouang-Mou, fleur blanche, iv 1904, *Esquirol* 101 (holo. *Ruellia esquirolii*, E).

**1618. *Peristrophe bivalvis*** (L.) Merr., Interpr. Rumph. Herb. Amboin. 476 (1917).

*Justicia bivalvis* L., Syst. Nat. ed. 10, 2:850 (1759).

*Hypöestes bodinieri* Lévl. in Fedde, Rep. Sp. Nov. 12:21 (1913) & Fl.

Kouy-Tchéou 19 (1914).

CHINA. Kweichow, environs de Kouy-Yang, cultivée dans les jardins, plante médicinale, croit en touffes à nombr. tiges, fleurs blanches un peu rosées, piquetées, (It. à Lo-Pie), 12 viii 1898, *Bodinier* 2460 (holo. *Hypöestes bodinieri*, E).

**1619. *Phlogacanthus pubinervis*** T. Anders.; Rehder in Journ. Arn. Arb. 16:315 (1935).

*Aeschynanthus dunnii* Lévl. in Fedde, Rep. Sp. Nov. 9:453 (1911) & Fl.

Kouy-Tchéou 180 (1914).

*Lonicera menelii* Lévl., Fl. Kouy-Tchéou 63 (1914).

CHINA. Kweichow, sine loc., fleur rougeâtre, *Esquirol* 737 (syntype *A. dunnii*, E); Lo-fou, couleur jaunâtre, iii 1909, *Cavalerie* 3475 (syntype *A. dunnii*, E); Thôg Méy, 1100 m, rouge tirant au jaune, 2 xii 1913, *Esquirol* 3240 (or 3840 or 3540) (holo. *L. menelii*, E).

*Strobilanthes deutziaefolius* Lévl. = *Abelia graebneriana* Rehder var. *deutziifolia* (Lévl.) Lauener (Caprifoliaceae).

**1620. *Strobilanthes forrestii*** Diels in Notes R.B.G. Edinb. 5:162 (1912); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):275 (1944).

*S. panpienkaiensis* Lévl., Cat. Pl. Yunnan 6 (1915); Brem. in Verh. Ned.

Akad. Wet., Afd. Nat. 2 sect. 41(1):281 (1944).

CHINA. Yunnan, vallée de Pan-Pien-Kai, 2500 m, scrofulariée vivace en touffes, fl. violacées, vii 1912, *E. E. Maire* (holo. *S. panpienkaiensis*, E).

*S. forrestii* is a variable species with a large number of forms and colour variants. Most of the variations, such as overall length, pubescence and flower colour are considered to be due to either habitat preference or single gene mutation.

*Strobilanthes gentiliana* Lévl. = *Sesamum indicum* L. (Pedaliaceae).

*Strobilanthes hypericifolius* Lévl. = *Abelia myrtilloides* Rehder (Caprifoliaceae).

**1621. *Strobilanthes lactucifolia*** Lévl. in Fedde, Rep. Sp. Nov. 12:534 (1913) & Fl. Kouy-Tchéou 22 (1914); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):278 (1944).

CHINA. Kweichow, brousse de Chan-Guy, viii 1911, *Esquirol* 3019 (holo.—n.v.).

The status and taxonomy of this species remains unsettled until the type specimen is located and examined.

**1622. *Strobilanthes lofouensis*** Lévl. in Fedde, Rep. Sp. Nov. 12:99 (1913) & Fl. Kouy-Tchéou 22 (1914); Rehder in Journ. Arn. Arb. 18:247 (1937); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):279 (1944).

CHINA. Kweichow, Lo-fou, iv 1907, *Cavalerie* 3288 (holo. E).

This species is anomalous in *Strobilanthes* sensu Bremekamp in having tailed anthers and smooth, circular 3-colporate pollen grains with a smooth tectum and many fine bands which are not strictly parallel to one another. It does not, however, fit into any of Bremekamp's segregate genera.

**1623. *Strobilanthes martinii*** Lévl. in Fedde, Rep. Sp. Nov. 12:19 (1913) & Fl. Kouy-Tchéou 22 (1914); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):280 (1944).

CHINA. Kweichow, sous-prefecture de Tchen-Lin-Tchéou, route de Lo-pie à Ou-La-Gay, bords du fleuve, fleurs bleu-vif, *Bodinier & Martin* 1930 (holo. E).

**1624. *Strobilanthes seguinii*** Lévl. in Fedde, Rep. Sp. Nov. 12:19 (1913) & Fl. Kouy-Tchéou 21 (1914); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):285 (1944).

CHINA. Kweichow, environs de Lo-pie, fleurs bleues-violacées, 14 iii 1898, *Séguin in herb. Bodinier* 2190 (holo. E); environs de Tou-chan, 17 vii 1897, *Cavalerie in herb. Bodinier* 2190D (E).

In his *Flore du Kouy-Tchéou* Léveillé keyed out this species (p. 21) yet he cited the type specimen under another species, *S. chaffanjoni* (p. 21) (now *Goldfussia chaffanjonii*). Oddly enough the name *S. chaffanjoni* did not appear in Léveillé's key but only in the account.

There are two labels with the type specimen (which consists of two separate twigs, 2190 and 2190D, on the same sheet). The name on the Séguin label is in Léveillé's hand.

**1625. *Tarphochlamys affinis*** (Griff.) Brem. in Verh. Akad. Wet., Afd. Nat. 2 sect. 41(1):157 (1944).

*Adenosma affinis* Griff., Notulae 4:133 (1854).

*Strobilanthes acrocephalus* T. Anders. in Journ. Linn. Soc. (Bot.) 9:473 (1867).

*S. thirionni* Lévl. in Fedde, Rep. Sp. Nov. 12:18 (1913); Lévl., Fl. Kouy-Tchéou 22 (1914), pro syn. sub *S. darrisi* Lévl.; Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):286 (1944).

CHINA. Kweichow, Kouy-Yang, mont du Collège, mont de N.D. de Liesse, belles fleurs bleues avec taches, 10 viii 1897, *Bodinier* 1765 (syntype *S. thirionni*, E); environs de Gan-Pin, mont au bord de la route, 9 viii 1897,

*Martin in herb. Bodinier* 1765 (syntype *S. thirionni*, E); La-Han, aux moulins, fleur blanc-rouge, ix 1904, *Esquirol* 219 (syntype *S. thirionni*, E).

Léveillé cited all three collections above (*Fl. Kouy-Tchéou* 22, 1914) under *Strobilanthes darrisii* Lévl., which is now *Tarphochlamys darrisii* (Lévl.) E. Hossain.

**1626. *Tarphochlamys darrisii*** (Lévl.) E. Hossain in Notes R.B.G. Edinb. 32:410 (1973).

*Strobilanthes darrisii* Lévl. in Fedde, Rep. Sp. Nov. 12:18 (1913); Lévl., Fl. Kouy-Tchéou 22 (1914), p.p.; Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):273 (1944).

CHINA. Kweichow, Hin-Gny-Hien, pelouses, fleur bleue-violet, xi 1906 *Esquirol* 1056 (holo. *S. darrisii*, E).

Until the establishment of *T. darrisii* the genus *Tarphochlamys* was considered to be monotypic. Even *Esquirol* 1056 does not differ widely from the type species of the genus but its subrosulate, much-branched habit, smaller elliptic-attenuate or subobtusate leaves, and eglandular pubescent corolla are quite distinctive.

**1627. *Tetragoga esquirolii*** (Lévl.) E. Hossain in Notes R.B.G. Edinb. 32:410 (1973).

*Strobilanthes esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 12:18 (1913) & Fl. Kouy-Tchéou 22 (1914); Brem. in Verh. Ned. Akad. Wet., Afd. Nat. 2 sect. 41(1):274 (1944).

CHINA. Kweichow, de Pa-Bonn à Ting-Chan, 16 xii 1904, *Esquirol* 322 (holo. E).

**1628. *Thunbergia fragrans*** Roxb., Fl. Corom. 1:47, t. 67 (1796); Lévl., Cat. Pl. Yunnan 7 (1915).

*T. bodinieri* Lévl. in Fedde, Rep. Sp. Nov. 12:21 (1913).

HONG KONG. Liane herbacée, dans une haie au bord des bois près de l'Aqueduc, fleurs blanches, 4 ix 1895, *Bodinier* 1318 (holo. *T. bodinieri*, E).

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#### MYOPORACEAE

**1629. *Myoporum sandwicense*** A. Gray var. *fauriei* (Lévl.) Kraenzl. in Fedde, Rep. Sp. Nov. Beih. 54:21 (1929); Degener in Fl. Haw. Fam. 5: 329 (1956).

*Myoporum fauriei* Lévl. in Fedde, Rep. Sp. Nov. 11:63 (1912).  
HAWAIIAN (SANDWICH) ISLANDS. Hawaii, Maunakea, 2000 m, vii 1909,  
*Faurie* 677 (typus—n.v.).

## VERBENACEAE

**1630. *Callicarpa bodinieri*** Lévl. in Fedde, Rep. Sp. Nov. 9:456 (1911) & Fl. Kouy-Tchéou 439 (1915); Rehder in Journ. Arn. Arb. 15:321 (1934) & 18:243 (1937); Hand.-Mazz., Symb. Sin. 7:900 (1936); Chang in Acta Phytotax. Sin. 1:288 (1951); Moldenke in Phytologia 14:49 (1966), 15:18 (1967), 20:496 (1971) & 22:193 (1971).

*C. seguini* Lévl. in Fedde, Rep. Sp. Nov. 9:455 (1911) & Fl. Kouy-Tchéou 440 (1915).

*C. feddei* Lévl. in Fedde, Rep. Sp. Nov. 10:439 (1912) & Fl. Kouy-Tchéou 439 (1915).

*C. girdaldiana* Hesse var. *subcanescens* Rehder in Sarg., Pl. Wils. 3:368 (1916); P'ei in Mem. Sci. Soc. China 1(3):34 (1932), p.p. excl. *C. lyi* Lévl.

Moldenke (op. cit. 14:51, 1966) chose *Bodinier* 2365 as the lectotype of *C. bodinieri*.

**1631. *Callicarpa bodinieri*** Lévl. var. *girdalii* (Hesse ex Rehder) Rehder in Journ. Arn. Arb. 15:322 (1934) & 18:243 (1937); P'ei in Bot. Bull. Acad. Sin. 3:31 (1949); Chang in Acta Phytotax. Sin. 1:289 (1951); Moldenke in Phytologia 14:54, 102 (1966), 15:18 (1967), 20:497 (1971) & 22:193 (1971).

*C. girdalii* (Hesse ex) Rehder in Bailey, Stand. Cycl. Hort. 2:629 (1914).

*C. mairei* Lévl., Sert. Yunnan 2 (1916) & Cat. Pl. Yunnan 297 (1917); P'ei in Mem. Sci. Soc. China 1(3):56 (1932).

**1632. *Callicarpa bodinieri*** Lévl. var. *lyi* (Lévl.) Rehder in Journ. Arn. Arb. 15:322 (1934) & 18:243 (1937); Hand.-Mazz., Symb. Sin. 7:900 (1936); Chang in Acta Phytotax. Sin. 1:289 (1951); Moldenke in Phytologia 14:60 (1966), 20:497 (1971) & 22:194 (1971).

*C. lyi* Lévl. in Fedde, Rep. Sp. Nov. 10:439 (1912) & Fl. Kouy-Tchéou 439 (1915); P'ei in Mem. Sci. Soc. China 1(3):34 (1932), pro syn. sub

*C. girdaldiana* var. *subcanescens*.

Rehder and Chang both included *C. grisea* Hand.-Mazz. in synonymy under var. *lyi* but Moldenke placed it under *C. bodinieri*.

*Callicarpa cavaleriei* Lévl. = *Ilex chinensis* Sims (Aquifoliaceae).

**1633. *Callicarpa dichotoma*** (Lour.) K. Koch, Dendrol. 2:336 (1872); P'ei in Mem. Sci. Soc. China 1(3):51 (1932); Rehder in Journ. Arn. Arb. 15:324 (1934); Chang in Acta Phytotax. Sin. 1:294 (1951); Moldenke in Phytologia 14:156 (1966) & 22:196 (1971).

*Porphyra dichotoma* Lour., Fl. Cochinch. 70 (1790).

*C. taquetii* Lévl. in Fedde, Rep. Sp. Nov. 12:182 (1913).

*C. japonica* Thunb. var. *taquetii* (Lévl.) Nakai, Trees & Shrubs Japan, ed. 1:336 (1922), Fl. Sylv. Kor. 14:31 (1923) & in Bull. Nat. Sci. Mus. Tokyo, no. 31:97 (1952); Moldenke in Phytologia 14:162 (1966), 16:378 (1968) & 21:34, 46 (1971).

*C. japonica* and *C. dichotoma* are two closely related species which Moldenke discusses extensively. He differs from other authors in not regarding *C. taquetii* as synonymous with *C. dichotoma* but admits (*Phytologia* 16:378, 1968) that he has not seen authentic material of *C. taquetii*. I have seen the holotype of *C. taquetii* in Edinburgh and consider it to be closer to *C. dichotoma* than to *C. japonica*.

*Callicarpa esquirolli* Lév. in Fedde, Rep. Sp. Nov. 9:456 (1911)—non Lév. in op. cit. 9:325 (1911) = *Dichroa febrifuga* Lour. (Saxifragaceae).

**1634. *Callicarpa longipes*** Dunn in Journ. Linn. Soc. (Bot.) 38:363 (1908); Moldenke in *Phytologia* 21:162, 208 (1971) & 22:201 (1971).

*C. panduriformis* Lév. in Fedde, Rep. Sp. Nov. 9:455 (1911) & Fl. Kouy-Tchéou 440 (1915), p.p. quoad *Chaffanjon* 2341.

*C. panduriformis* consists of two syntypes—*Chaffanjon in herb.* Bodinier 2341 and *Laborde in herb.* Bodinier 2507. Moldenke considers that *Chaffanjon* 2341 is *C. longipes* but he does not make any direct reference to the other syntype, which is *C. rubella* var. *hemsleyana* (q.v.—no. 1637).

**1635. *Callicarpa macrophylla*** Vahl; P'ei in Mem. Sci. Soc. China 1(3):23 (1932); Rehder in Journ. Arn. Arb. 15: 320 (1934); Chang in Acta Phytotax. Sin. 1:283 (1951); Moldenke in *Phytologia* 21:214 (1971) & 22:202 (1971).

*C. dunniana* Lév. in Fedde, Rep. Sp. Nov. 9:456 (1911) & Fl. Kouy-Tchéou 439 (1915).

*C. macrophylla* Vahl var. *kouytchensis* Lév., Fl. Kouy-Tchéou 440 (1915).

**1636. *Callicarpa rubella*** Lindl. var. *dielsii* (Lév.) Li in Journ. Arn. Arb. 25:425 (1944); Moldenke in *Phytologia* 21:164, 489 (1971) & 22:206 (1971); Lauener in Notes R.B.G. Edinb. 32:101 (1972).

*Viburnum dielsii* Lév. in Fedde, Rep. Sp. Nov. 9:443 (1911) & Fl. Kouy-Tchéou 66 (1914).

*Callicarpa dielsii* (Lév.) P'ei in Mem. Sci. Soc. China 1(3):37 (1932); Rehder in Journ. Arn. Arb. 15:323 (1934); Chang in Acta Phytotax. Sin. 1:296 (1951), pro syn. sub *C. rubella*.

**1637. *Callicarpa rubella*** Lindl. var. *hemsleyana* Diels; P'ei in Mem. Sci. Soc. China 1(3):40 (1932), p.p.; Rehder in Journ. Arn. Arb. 15:323 (1934), p.p.; Moldenke in *Phytologia* 21:490 (1971) & 22:206 (1971).

*C. panduriformis* Lév. in Fedde, Rep. Sp. Nov. 9:455 (1911) & Fl. Kouy-Tchéou 440 (1915), p.p. quoad *Laborde in herb.* Bodinier 2507; Chang in Acta Phytotax. Sin. 1:296 (1951), pro syn. sub *C. rubella*.

*C. panduriformis* comprises two syntypes, *Laborde* 2507 and *Chaffanjon* 2341. The latter has already been referred to under *C. longipes*.

In the diagnosis of *C. seguinii*, of which the type is *Cavalerie in herb.* Bodinier 2341, Lévillé distinguished it from *C. rubella* and '*C. chaffanjonii*' but *C. chaffanjonii* is not described or referred to anywhere else by Lévillé. Moldenke placed '*C. chaffanjonii* Lév. in obs.' in

synonymy under *C. rubella* var. *hemsleyana*, implying that Léveillé intended the epithet '*chaffanjoni*' to refer to one of the syntypes of *C. panduriformis*. However, *C. chaffanjoni* must be regarded as a *nomen nudum*.

**1638. *Caryopteris divaricata*** (Sieb. & Zucc.) Maxim in Bull. Acad. Sci. St. Pétersb. 23:390 (1877); P'ei in Mem. Sci. Soc. China 1(3):179 (1932); Nakai in Bot. Mag. Tokyo 35:205 (1921).

*Clerodendron divaricatum* Sieb. & Zucc. in Abh. Akad. Wiss. Münch. Math.-Phys. Kl. 4(3):154 (1846)—non Jack (1820).

*Microtaena? coreana* Lévl. in Fedde, Rep. Sp. Nov. 9:223 (1911); C. Y. Wu in Acta Phytotax. Sin. 10:56 (1965).

KOREA. Seoul, monte Nan-San, 23 ix 1901, *Faurie* 752 (holo. *M. coreana*, E).

*Caryopteris esquirolii* Lévl. = ***Pogostemon glaber*** [Benth. ex] Hook. f. (Labiatae).

*Caryopteris fluminis* Lévl. = ***Colquhounia seguinii*** Van. (Labiatae).

*Caryopteris mairei* Lévl. = ***Teucrium palmatum*** Benth. (Labiatae).

**1639. *Caryopteris paniculata*** (Kurz) C.B. Cl. in Hook. f., Fl. Brit. Ind. 4:597 (1885); P'ei in Mem. Sci. Soc. China 1(3):176 (1932); Rehder in Journ. Arn. Arb. 15:326 (1934) & 18:243 (1937).

*Callicarpa esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 9:325 (1911)—non Lévl. 9:456 (1911); P'ei in Mem. Sci. Soc. China 1(3):56 (1932).

*Callicarpa martini* Lévl. in Fedde, Rep. Sp. Nov. 9:455 (1911) & Fl. Kouy-Tchéou 440 (1915).

The later *C. esquirolii*, renamed *Callicarpa leveilleana* by Fedde, is *Dichroa febrifuga* Lour. (Saxifragaceae). P'ei realised this but also confused them, relating the earlier *C. esquirolii* to *Dichroa*.

**1640. *Caryopteris terniflora*** Maxim. in Bull. Soc. Nat. Mosc. 54(1):40 (1879); Lévl., Fl. Kouy-Tchéou 440 (1915); P'ei in Mem. Sci. Soc. China 1(3):174 (1932).

*Ocimum aureoglandulosum* Van. in Bull. Acad. Géog. Bot. 14:171 (1904).

CHINA. Kweichow, entre Hin y hien et Troù, bords d'une petite rivière profondément encaissée, quai du pont, plante herbacée ou sous-ligneuse, quelquefois très branchée, fleurs bleu pâle, 12 iv 1897, *Bodinier* 1533 (holo. *O. aureoglandulosum*, E).

**1641. *Clerodendrum bungei*** Steud.; Rehder in Journ. Arn. Arb. 15:324 (1934).

*C. foetidum* Bge in Mém. Acad. Imp. Sci. St. Pétersb. 2:126 (1833)—non D. Don (1825); P'ei in Mem. Sci. Soc. China 1(3):138 (1932); Bremekamp in Fedde, Rep. Sp. Nov. 37:191 (1934).

*Pavetta esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 13:178 (1914) & Fl. Kouy-Tchéou 371 (1915).

*Clerodendron esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 11:298 (1912)—non 11:302 (1912) = *Tacca chantrieri* André (Taccaceae).

**1642. *Clerodendrum japonicum*** (Thunb.) Sweet; P'ei in Mem. Sci. Soc. China 1(3):140 (1932); Rehder in Journ. Arn. Arb. 15:325 (1934).

*C. darrisii* Lévl. in Fedde, Rep. Sp. Nov. 11:301 (1912).

*C. esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 11:302 (1912)—non *C. esquirolii* Lévl., op. cit. 11:298 (1912).

*C. leveillei* [Fedde ex] Lévl., Fl. Kouy-Tchéou 442 (1915) & Cat. Pl. Yunnan 277 (1917).

The type of *C. esquirolii* Lévl. (op. cit. 11:298, 1912), *Esquirol* 2802, is *Tacca chantrieri* André. *Esquirol* 3278, also cited in *Flore du Kouy-Tchéou* under *C. esquirolii*, is also *T. chantrieri*.

Under *Clerodendron scaposum* Hemsl. in *Flore du Kouy-Tchéou*, Lévillé cites *Esquirol* 2144. This specimen is *Tacca plantaginea* (Hance) Drenth.

**1643. *Clerodendrum mandarinorum*** Diels; P'ei in Mem. Sci. Soc. China 1(3):145 (1932); Rehder in Journ. Arn. Arb. 15:325 (1934).

*C. bodinieri* Lévl. in Fedde, Rep. Sp. Nov. 9:325 (1911) & Fl. Kouy-Tchéou 441 (1915).

*C. cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 10:439 (1912).

*C. bodinieri* Lévl. var. *cavaleriei* (Lévl.) Lévl., Fl. Kouy-Tchéou 441 (1915).

**1644. *Premna cavaleriei*** Lévl. in Fedde, Rep. Sp. Nov. 10:439 (1912) & Fl. Kouy-Tchéou 443 (1915); P'ei in Mem. Sci. Soc. China 1(3):87 (1932); Rehder in Journ. Arn. Arb. 15:324 (1934).

*Premna esquirolii* Lévl. = *Viburnum congestum* Rehder (Caprifoliaceae).

*Premna mairei* Lévl. = *Meliosma dilleniifolia* (Wall. ex Wight & Arn.) Walp. subsp. *cuneifolia* (Franch.) Beus. var. *multinervia* Beus. (Sabiaceae).

*Premna merinoi* Lévl. = *Hydrangea aspera* D. Don subsp. *robusta* (Hook. f. & Thoms.) McClintock (Saxifragaceae).

**1645. *Premna parvilimba*** P'ei in Mem. Sci. Soc. China 1(3):62 (1932); Rehder in Journ. Arn. Arb. 15:324 (1934); Lauener in Notes R.B.G. Edinb. 27:274 (1967).

*Celastrus yunnanensis* Lévl., Cat. Pl. Yunnan 32 (1915)—non *P. yunnanensis* W.W. Sm. (1916) nec Dop (1923).

**1646. *Premna puberula*** Pamp. in Nuov. Giorn. Bot. Ital. n.s. 17:701 (1910); P'ei in Mem. Sci. Soc. China 1(3):85 (1932); Rehder in Journ. Arn. Arb. 15:324 (1934) & 18:243 (1937); Hand.-Mazz., Symb. Sin. 7:905 (1936).

*P. martini* Lévl. in Fedde, Rep. Sp. Nov. 10:440 (1912) & Fl. Kouy-Tchéou 443 (1915).



*P. bodinieri* Lévl. in Fedde, Rep. Sp. Nov. 10:440 (1912) & Fl. Kouy-Tchéou 443 (1915); Dop in Bull. Soc. Bot. Fr. 70:446 (1923); P'ei in Mem. Sci. Soc. China 1(3):80 (1932); Rehder in Journ. Arn. Arb. 15:324 (1934).

*Premna valbrayi* Lévl. = *Viburnum foetidum* Wall. var. *ceanothoides* (Wight) Hand.-Mazz. (Caprifoliaceae).

1647. *Verbena officinalis* L., Sp. Pl. 20 (1753); P'ei in Mem. Sci. Soc. China 1(3):7 (1932).

*V. officinalis* L. var. *ramosa* Lévl. in Fedde, Rep. Sp. Nov. 10:440 (1912) & Fl. Kouy-Tchéou 443 (1915).

CHINA. Kweichow, environs de Kouy-yang, bords du fleuve au Lan-mououay, fleurs bleu-violet, d'une nuance diff. du *V. officinalis*, 16 vii 1898, Bodinier 2412 (holo. var. *ramosa*, E).

*Vitex esquirolii* Lévl. = *Buddleia asiatica* Lour. (Loganiaceae).

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P'EI, C. (1932). The Verbenaceae of China. *Mem. Sci. Soc. China* 1(3):1-193.

#### PHRYMACEAE

1648. *Phryma leptostachya* L. var. *oblongifolia* (Koidz.) Honda in Bot. Mag. Tokyo 50:608 (1936); Hara in Journ. Fac. Sci. Univ. Tokyo (Bot.) 6:377 (1956) & Fl. E. Himal. 306 (1966); Thieret in Journ. Arn. Arb. 53:229 (1972).

*P. esquirolii* Lévl. in Fedde, Rep. Sp. Nov. 12:534 (1913).

*P. oblongifolia* Koidz. in Bot. Mag. Tokyo 43:400 (1929).

*P. leptostachya* L. var. *asiatica* Hara, Enum. Sperm. Jap. 1:297 (1949).

*P. leptostachya* L. subsp. *asiatica* (Hara) Kitamura in Acta Phytotax. Geobot. 17:7 (1957).

*P. asiatica* (Hara) Degener & Degener in Phytologia 22:212 (1971).

CHINA. Kweichow, Ri-Sen, *Esquirol* 3102 (holo. *P. esquirolii*-n.v.).

The type of *P. esquirolii* has not been found but there are several specimens of *P. leptostachya* in the Lévillé herbarium. *P. esquirolii* is not mentioned by Lévillé in *Cat. Pl. Yunnan* nor in *Flore du Kouy-Tchéou* but a Maire specimen has been determined by Lévillé as *P. esquirolii*.